



A Weekly Journal of Pharmacy and the Drug-trade.

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TINCTURE-STANDARDS.

We have had Mr. F. W. Fletcher's table in *THE CHEMIST AND DRUGGIST* of January 26, 1901, reprinted upon a card with eyelets and string for hanging in the laboratory or at the dispensing-counter, and will send a copy to anyone who sends us four penny stamps.

BUSINESS WITH MERCHANT-SHIPPERS.

THE CHEMIST AND DRUGGIST of March 9 will be the annual issue to merchant-shippers of the United Kingdom who do business in chemicals, drugs, druggists' sundries, perfumery, bottles, indiarubber goods, and other articles of merchandise common to our business. The exports of these articles last year amounted to over 25,000,000l., and showed a marked advance over 1899. Our merchant-shippers' issue contributes its share to the encouragement of this important trade, and we commend it to all business-houses. Our publisher will furnish full particulars on application.

Summary.

GOOD IDEAS on shop heating are described by correspondents on p. 293.

COLONEL WILEY, of Coventry, is this week's bird of passage (p. 280).

THE REVISED PHARMACY BILL is not yet ready for publication (p. 274).

WE give some news from Mafeking, which has been visited by a cyclone (p. 268).

IS SAFFRON really useless as a medicine? We should like to know (p. 284).

THE TEXT of an address by the Chemical Society to the King is printed on p. 286.

MAGNALIUM is a new alloy of magnesium and aluminium used for making field-glasses (p. 287).

A NEW METHOD of comparing the affinity values of acids has been described to the Chemical Society (p. 283).

STOCKPORT DISPENSING is said to be bad. Six cases are to be tried under the Sale of Food and Drugs Acts (p. 266).

THE young man Haddock, who has impersonated others at the Dublin examinations, has been found guilty (p. 263).

DR. MAX VON PETTENKOFER, the eminent German chemist, shot himself, fearing that he was becoming insane (p. 291).

MR. MUNDAY has now been deposed by the High Court from his position as manager of his pharmacy in Cardiff (p. 278).

PHARMACY is supplying another two lieutenants to the army—Lieutenant George Lorimer and Lieutenant Hirst (p. 292).

THE COUNCIL of the Pharmaceutical Society of Ireland has adopted a resolution in regard to counter-prescribing (p. 277).

A GROCERS' organisation on the lines of the Pharmaceutical Society is suggested by Mr. John Williams, of Manchester (p. 284).

CELLULOSE is considered by Mr. Fenton and Miss Gostling to be a ketohexose, therefore a carbohydrate resembling sugar (p. 286).

"VASELINE" has been removed from the trade-marks register because it is a descriptive word; leave has been given to appeal (p. 278).

THE ASH-YIELDS of cardamoms, senna, and colocynth are considered by Professor Greenish not to give reliable data for judging of the value of the drugs (p. 274).

WE REPORT two papers on arsenic in foods—one by Dr. Grossmann on p. 287, and another by Mr. Wm. Thomson read to the Society of Arts on Wednesday (p. 283).

THE WEST LONDON MAGISTRATE has decided that Mr. Preece, who trades in several places as "Squire," infringes the Pharmacy Act, Section 17, by not using his own name (p. 277).

MR. JOHN TAYLOR, of Bolton, delivered to the Bradford Chemists' Association on Wednesday evening a thoughtful discourse on "Individualism in Pharmacy," which we print on p. 271.

DAY'S METROPOLITAN DRUG-COMPANY (LIMITED) have been ordered to pay 75l. damages to a customer who got bichromate of potash for bicarbonate at one of the company's branches (p. 278).

IT turns out that the analytical results were wrong as to arsenic in borax, upon which several retailers were prosecuted in Paisley. The summonses were dismissed after strong statements by the defendants' solicitor (p. 279).

THE COURT OF APPEAL is hearing counsel in the Pharmaceutical Society's Appeal against the Worcester decision, holding that a local dealer had not infringed the Pharmacy Act by taking an order and the money for an arsenical weed-killer (p. 277).

A FAIR AMOUNT OF TRADE is being done in the drug and chemical markets this week, and several important changes in values have been made. Cinchona, copaiba, lemon and bergamot oil, and ipecac. are all dearer; while sugar of milk, saffron, tannic and gallic acids are cheaper (p. 296).

MR. BROADHEAD, of Batley, said some funny and pertinent things at Dewsbury this week about the Pharmacy Bill, but failed to convince his fellow-members that an action by the Pharmaceutical Society against companies for the use of titles will settle the matter (p. 289).

A New Book.

WE have reprinted our *DIARY* monograph, "Opening a Pharmacy" in book form, uniform as to binding with the "Art of Dispensing." The price is 1s. net, or 1s. 1/2. post free. It is a most useful book for those who contemplate starting in business as chemists and druggists.

English News.

Local Newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

Messrs. Bing & Sons have been appointed chemists to the Canterbury Urban Council.

At a meeting of the Hampshire County Council on Monday, Dr. Arthur Argell was reappointed county analyst.

The Exeter City Council has finally decided that the salary of the city analyst be 180% a year, and that the analyst provide his own laboratory.

The pharmacy of Mr. W. G. Saffrey, High Street, Mile Town, Sheerness, was visited by a bullock last week. It did considerable damage.

An old woman named Gumble died suddenly in the shop of Mr. G. Coverdale, pharmaceutical chemist, Gladstone Road, Scarborough, on February 5.

Seven samples of cod-liver oil were amongst the articles analysed by Mr. Otto Hehner, public analyst for West Sussex, last quarter. All were B.P.

The Maidstone Urban District Council has accepted the tender of Messrs. Armstrong & Co. (Limited), London, for a supply of disinfectants to the borough.

Mr. R. A. Cripps, pharmaceutical chemist, Paddock Hill Road, Hayward's Heath, has been appointed public analyst to Hayward's Heath Urban District Council.

The Local Government Board has decided that diphtheria-antitoxin shall be classed with the expensive drugs and medicines supplied to medical officers by Guardians.

The man Palombi, erroneously described in the daily papers as a chemist, has been sentenced to fifteen months' hard labour for supplying a noxious medicine for an unlawful purpose to a domestic servant.

At Derby, on February 5, Henry Laurence was sent to prison for six months with hard labour, for attempting to "ring the changes" on Mr. William Harold Hoare, chemist and druggist, 8 Osmaston Road, Derby, and two other traders.

The Southampton Board of Guardians have increased the salary of the workhouse dispenser, Mr. W. H. Adams, from 120% to 130% per annum, in consideration of the length of his service and the efficient manner in which he had discharged his duties.

Frederick Carlton was fined 10s. and costs at West Ham on February 9, for obstructing the highway at Upton Park. Frederick is the proprietor of a hair-restorer, and the eloquence with which he expatiated on its virtues attracted an obstructive crowd.

At Manchester, on February 8, Messrs. Richard Holden (Limited), brewers, Blackburn, were awarded 1,980% damages against Messrs. Bostock & Co., sugar-refiners, Liverpool, for the value of beer destroyed and damage to business in consequence of the latter firm supplying them with glucose contaminated with arsenic.

At an inquest held at Edmonton on February 12, respecting the death of Eva Caroline Maud Hooper, wife of a publisher's manager, it transpired that deceased had taken quantities of salts, pennyroyal, and steel to procure miscarriage. As the result of a *post-mortem* examination, the medical witness concluded that an instrument had also been improperly used, thus setting up septic poisoning, which was the cause of death.

Better than Beef-tea.

The Atcham Board of Guardians, on February 5, again considered the bovril-supply. Tenders for the supply of that commodity were submitted by the Clerk, whereupon Mr. Greatorex protested against the fact that the tenders for the supply had not been advertised. He objected to bovril being "thrust" on the Board, and advocated the use of fresh beef for making beef-tea. The Master pointed out that had

fresh beef been used instead of bovril, the cost would have been more than double during the year. The Board decided to continue the use of bovril, considering that it was much cheaper and more beneficial than beef-tea.

To be Prosecuted.

At the meeting of the Stockport Town Council on February 6, the Sanitary Committee reported that the Medical Officer of Health had sent out six medical prescriptions, containing drugs of the British Pharmacopoeia, to be made up by dispensing chemists in the town. In two cases the analysis showed that the medicines had not been dispensed in strict conformity with the prescriptions, and the Council decided to prosecute.

The Terrier, the Hamper, and the Burglar.

On February 4 a futile burglary took place at Vicarage Lane Post-office, West Ham, E., occupied by Mr. H. Litten, chemist and druggist. The intruder entered by a back window, and had removed the lock from the door leading to the shop when a terrier discovered him, and barked loudly. The burglar hurried into the shop, pulled open a drawer which contained nothing of value, and knocked over a few things in the way. To crown all, in his haste he upset a large hamper in the middle of the shop with a loud crash. The chagrined visitor had to make a hasty retreat, and Mr. Litten was just in time to see a short, thick-set form disappear into the darkness.

Stopping the Dog-fight.

At Doncaster Police Court on February 9, Mr. Robert Shields, chemist, Mexborough, was summoned for ill-treating a dog by throwing upon it a quantity of ammonia. The complainant was a pit-sinker, whose dog had been fighting with another, and it was alleged that Mr. Shields threw the ammonia over the dogs. James William Fielding, assistant to the defendant, said he, and not the defendant, threw the ammonia. He thought it a more humane way of separating the dogs than the kicking and tail-pulling methods practised by the crowd surrounding the belligerents. The Magistrates dismissed the case.

Inter-pharmacy Football League.

Metropolitan College v. South London (Muter's).—A match in this League competition was played at Willesden on February 9 under unfavourable conditions, the ground being very heavy. After a keen game the Metropolitan team won by 4 goals to 1.

Notes from Birmingham.

At the Aston District Council meeting Mr. S. Fisher, a chemist, suggested the incorporation of Aston, because at present they were in the hands of the County Council, and the Food and Drugs Act was not properly administered.

A local debating society, which has discussed the "Medical Consultative Institution," has decided that it is not a sound progressive measure, and thinks the attitude adopted towards it by the great majority of the medical profession is justifiable.

The statue of Priestley—the discoverer of oxygen—in front of the Council-house is in danger of being removed to Sparkbrook, where Priestley once resided. The general opinion appears to be in favour of retaining the statue in its present location.

A Prescribing Chemist.

At an inquest held at Whitland by Mr. T. Walters, the Coroner for West Carmarthenshire, on January 30, it was stated that the deceased, an old man named Williams, who suffered from shortness of breath, had been under treatment by Mr. William Jenkins, chemist, St. Clears, just before he died. A daughter of the deceased deposed that Mr. Jenkins had visited her father and sent medicine to him afterwards. Dr. Cresswick Williams, who was called in, said deceased had probably died from syncope due to an affection of the heart or lungs. Mr. Jenkins had been subpoenaed to attend the inquest, but was not present, and the Coroner adjourned the inquiry until a later hour in the afternoon, when Mr. Jenkins attended. In the course of his evidence Mr. Jenkins said deceased had consulted him six months

previously about his trouble. From what deceased told him he (Mr. Jenkins) concluded that deceased's heart and liver were affected, and he prescribed accordingly. He produced a copy of the prescription given, for the Coroner's inspection. The following conversation then took place between Coroner and chemist:—

You are not a qualified practitioner—only a chemist?—They come to me for medicine. I do not visit patients

Don't you go about the country in a trap, and see sick people who are ill?—I drive to Pembrokeshire every week, and see some friends on the road.

I only want to know if you visit people who are ill, and prescribe for them?—No; unless they come to my place. If they come to me for medicine, I give them medicine.

Suppose I wanted you, and asked you to come and see me, would you come?—I daresay I would. I would have the same right to come to see you as you would have to come and see me.

Do you examine people?—Sometimes.

You know that it is irregular for a chemist to prescribe?—I have a brother at home suffering from rheumatic fever. Anyone can examine him, and it is hard for me not to prescribe for him. I do prescribe largely for people who ask me, and many people consult me.

Dr. Rowland Thomas agreed with the other medical witness that death was the result of syncope. In reply to the Coroner he said the prescription given by Mr. Jenkins was good for the heart: it contained drugs always given in such cases. The Coroner in summing up, said he did not want to do Mr. Jenkins any injustice, but he could not pass a case like that without a protest. Mr. Jenkins should take steps to qualify himself as a medical man. That was not the first time he had had to caution Mr. Jenkins. He would report the facts to the proper authorities. A verdict in accordance with the medical evidence was given.

Cooper's Hill College.

A deputation, introduced by Lord Kelvin, was received by Lord George Hamilton, Secretary for India, on February 13, in regard to the recent dismissals of part of the staff from the Royal Indian Engineering College, Cooper's Hill. Lord Kelvin stated the case for the deputation, and Lord Lister, Lord Rayleigh, Sir H. Roscoe, Professor H. E. Armstrong, and Professor Stoney also spoke. Lord G. Hamilton, in his reply, expressed the opinion that the deputation and those who had signed the memorial they came to support were under a misapprehension, and that all the statements that had been made on the subject had been *ex parte*. He sketched the history of the college, defended the competence and the action of the Board of Visitors, and, after citing facts to show that the condition of the college was unsatisfactory, he gave details as to the treatment in respect of pensions and gratuities accorded to the teachers who had been dismissed. The Government, he maintained, had acted in the interest of the country, and in reliance on the highest authorities they could consult. Lord Kelvin has since protested that Lord G. Hamilton has been insufficiently informed.

Free Trade in Poisons.

The crusade by "The Traders in Poisons or Poisonous Compounds for Technical and Trade Purposes Protection Association" still continues. A communication from that body was read at a recent meeting of the Manchester and District Grocers' Association urging support of their little Bill, and pointing out the iniquities of the Pharmaceutical Society. Councillor Kendall said the matter required the careful consideration of every grocer, inasmuch as there was a probability of the Pharmaceutical Society doing them some injury by their aggressive methods. Mr. Pugh had noticed that prosecutions were being instituted throughout the country, and almost every week the Pharmaceutical Society brought cases against traders. The President (Mr. John Williams) pointed out that the Pharmaceutical Society were also prosecuting their own members as well as grocers.

Cheshire Analyst's Report.

The report of Mr. Carter Bell, county analyst, for the quarter ending December 31, states that among 356 samples analysed three were of camphorated oil. One contained 80 per cent. and the second 84 per cent. of mineral oil instead of olive oil, and the third was deficient in camphor by 40 per cent.

Fires.

Amongst the sufferers in the destructive fire which occurred in Finsbury, E.C., on February 7, was the firm of

Messrs. L. Rose & Co. (Limited), lime-juice merchants, 11 Curtis Road, E.C. Their building and its contents were slightly damaged by fire and water, but business has not been interrupted.

A destructive fire occurred on February 10, at Ordnance Wharf, Blackwall Point, the works of Messrs. Forbes, Abbott & Lennard (Limited), chemical-manufacturers. Three huge tanks, containing altogether about 180,000 gals. of tar, became ignited, and the buildings covering an area of about 300 feet by 50 feet, used for tar-stills, boiler-houses, &c., caught on fire. The outbreak was preceded by a violent explosion which wrecked a corrugated-iron shed used as a boiler-house, and caused much damage to neighbouring premises. While the fire was in progress there were two smaller explosions, but no one was injured. The outbreak was ultimately subdued through the united efforts of twelve fire-brigade steamers, three river-floats, and ninety firemen.

The Week's Poisonings.

Ten fatalities are reported from poisoning during the past week. The only unscheduled poisons employed were ammonia and bichromate of potash. In the scheduled eight, carbolic acid and chloroform each occur twice, the other four being prussic acid (taken by a City merchant), liniment of aconite (swallowed by misadventure), chloral hydrate (with which a tutor at the Tutorial College, Red Lion Square, poisoned himself), and morphia (which the Bow divisional surgeon injected into himself in a 30-gr. quantity).—Mr. Langham (the City Coroner) held an inquest at St. Bartholomew's Hospital on February 12 regarding the death of Thomas Perry (37), a warehouseman with Messrs. S. Maw, Son & Sons, Aldersgate Street, E.C. The evidence showed that deceased had taken a drink out of a bottle which he thought contained stout, but it was really a bottle of bichromate battery solution that another employé (Kirkham) was taking home to a friend. Kirkham came on the spot just too late to prevent Perry's mistake, and Perry died in the hospital. A verdict of accidental death was returned.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Business Change.

Mr. Whelan, L.P.S.I., late of Belfast, has just opened a new pharmacy at Charlemont Street, Dublin.

Apothecaries' Loyalty.

The Governor and Council of the Apothecaries' Hall of Ireland despatched a telegram of condolence to King Edward VII. on the death of Queen Victoria, and received a reply through the Home Office on February 5.

Fire.

Early on February 7 the premises of Mr. J. A. Woodside, pharmaceutical chemist, at the corner of Church and Mill Streets, Ballymena, were discovered to be on fire. Before the flames were extinguished much damage was done by smoke and water to Mr. Woodside's premises and the next house.

Personal.

Dr. E. W. Allsom has been appointed extern physician to the Charitable Infirmary and County Hospital, Cork. Dr. Allsom is in practice in Cork, but is connected with the drug-trade, as he passed the L.P.S.I. examination in 1885, before he entered the medical profession. He was formerly lecturer in chemistry in the Cork Municipal School of Science, and demonstrator in practical pharmacy in Queen's College, Cork.

Builder's Claim.

On February 11 in King's Bench Division Dublin, judgment was delivered in the case of Good v. Hayes, Conyngham, and Robinson (Limited). Defendants applied for an order that the verdict and judgment entered for the plaintiff on a

counter-claim be set aside. The action was on a building contract by the plaintiff, a Dublin builder, who claimed 365*l.* for buildings erected in Kingstown for the defendants. The defendants brought that sum into court, and counter-claimed for 260*l.* The Chief Baron directed that the defendants could not recover on their counter-claim without the certificate of the architect. The Court now held that the Chief Baron was right, and refused the motion, with costs.

The Personation Case.

At the Dublin Commission Court on February 8, Joseph Haddock was indicted for having on two occasions personated Robert Cooper and Alexander Fyfe at the Preliminary examinations of the Royal College of Physicians in Ireland (see *C. & D.*, February 9, page 237). Mr. Justice Kenny, on hearing details of the case, exclaimed, "What kind of supervision could there be at this examination? It is most extraordinary: such laxity of discipline and supervision I never saw or heard of." One of the candidates, Mr. Fyfe, chemist's assistant, employed in Leybourne's pharmacy, Rathmines, detailed fully the papers he took in an examination. He admitted his conduct was shameful, and the Judge pointed out that he had previously sworn falsely in his evidence. Counsel for the defence said no one envied the position of Fyfe or Cooper. They might censure a man for a lie, but he was not legally amenable for the falsehood. Personation was a lie, but no legal criminal offence was committed. The Judge agreed there was some legal difficulty in convicting. The jury found Haddock guilty, and the case was adjourned until April, and the prisoner was allowed out on bail, authorities in the meantime to be sought for.

East Indian News.

BOMBAY, January 26.

THE INDIAN GOVERNMENT announce they are considering the reorganisation of the Army Hospital Corps.

PERSONAL.—Mr. Stafford, who is travelling on behalf of "Lemco," Hall's wine, Field's soaps, &c., was in Bombay when the mail left.

MESSRS. TREACHER'S theft-case has ended in a magisterial acquittal of the accused cashier and compounder. The case against the medical man concerned is still pending.

BAZAAR ITEMS.—Ten hundredweights perchloride of mercury and $\frac{1}{2}$ cwt. rad. jalapæ found a market this week. Business has been pretty quiet in the native drug-bazaar during the last two weeks.

PHENYL, sulphur, and a solution of corrosive sublimate have been prescribed in Bhavnagar as the means of anti-plague disinfection. In Bangalore phenyl has been reported upon as useless for this particular purpose.

A VALUABLE DISCOVERY.—The deposits of phosphates discovered by Sir John Murray on Christmas Island some years ago promise to be of great value, as recently large quantities have been obtained—a matter of particular interest to India, as phosphates form the basis of artificial manure for indigo-culture.

BERTIE-SMITH & CO. (LIMITED).—The statutory meeting of this company was held on January 21. For the three months in which the firm has traded as a company the receipts have been 22,000*r.* over the corresponding months of 1899. Of 6,75,000*r.* issued in shares when the company was floated, only 1,12,600*r.* now remain unallotted. The 6-per-cent. preferential dividend for the period ending December 31 will be payable on March 31.

THE INDIAN REVENUE DEPARTMENT has a conscience. Hitherto when a ryot applied for a licence to cultivate the hemp-plant, the application had to be stamped; when he applied for permission to harvest the crop, the application had to be stamped; when he applied for permission to convert the crop into intoxicating drugs, the application had to be stamped; when he applied for a permit to send the intoxicating drugs to market, the application had to be stamped. A notification in the *Gazette of India* now makes it known that the stamp-fees chargeable on these various kinds of applications are henceforth remitted.

South African News.

(From our Colonial Correspondents.)

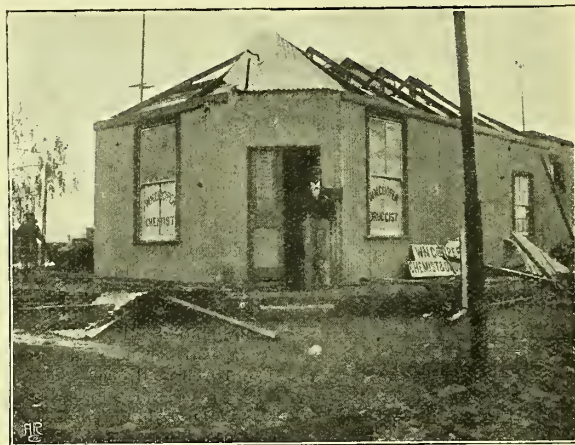
THE QUEEN'S DEATH.—When the news arrived at Cape Town of the death of Queen Victoria the local drug-houses closed their premises shortly after noon.

BUSINESS CHANGE.—Messrs. Strachan & Co., chemists, mineral-water manufacturers, Salisbury, Rhodesia, have sold their business to Messrs. Drakes & Dobie, who will continue to use the style of "Strachan & Co." Mr. Drakes will carry on the Pioneer Street business, Mr. Dobie supervising the branch at Baker Avenue.

CIVIL COMPOUNDERS WOUNDED.—In the holding-up of the train and consequent action at Vlakfontein, between Standerton and Johannesburg, on February 6, Dispensers C. E. Martlew and A. E. Adams, of Pretoria, are reported slightly wounded, and Private S. O. Gorman, of the R.A.M.C., reported missing, has been released.

BUSINESS IN CAPE COLONY.—Since the extension of martial law in the Colony business has quieted down still further, and as yet little signs of better or brighter days appear. Very little business is being done. From some quarters there is heard the call to extend the military rule even to Cape Town. Such a contingency is, from many points, undesirable, but is, unfortunately, not improbable.

MAFEKING NEWS.—Mr. J. E. Jones, chemist and druggist has returned to take up his management of Mr. W. N. Cooper's pharmacy at Mafeking, after a long holiday at home following the siege. In October last a cyclone struck the town, and the elements met with more success destructively than the Boers. At the time Mr. Donaldson, who was in charge of the pharmacy, noticed that the shop began to rock, and he was steadying a large carboy on the window-shelf, when a swirl of wind lifted the roof off as shown in our illustration,



and took the verandah along with it, snapping the poles like matchwood. After the wind the rain poured down in a tropical deluge, and one can faintly imagine the state of the pharmacy and its labelled bottles after a two-hours' rain-storm with no roof on the shop. Business is not yet in normal condition, as it is very difficult to get goods up from the ports. Beef is unobtainable, vegetables are scarce and dear, and with firewood at 3*s.* per 100 lbs., no houses to be obtained, and single rooms letting at 3*l.* per month—Mr. Donaldson, who relieved Mr. Jones, went on to Zeerust on December 20 prospecting, with the idea of carrying on a temporary business there, until he could get back to his own business in Pretoria. He took with him a case of assorted lines, intending to return within a week, but Lord Methuen vacating Ottoshoep broke the communication. Mr. Donaldson is, therefore, in a state of siege once more—he has already been through the siege of Kimberley as a corporal in the Town Guard. Our illustration shows Mr. Donaldson, who is a native of Kirkcaldy, N.B., standing in the doorway.

French News.

(From our Paris Correspondent.)

ROYAL ANÆSTHESIA.—At a meeting of the Academy of Medicine, Paris, on January 22, one of the members, discussing anæsthesia, remarked upon the fact that the death of Queen Victoria brought to mind the use of an anæsthetic at the time of her Majesty's first accouchement. It was an epoch of the first steps in the usage of ether and chloroform, and the action of the medical men and assent of the Queen to the use of an anæsthetic brought some severe remonstrances from several sects of "puritans and pietists" in the United Kingdom, who pointed out the Biblical injunction that a woman should bear children "with sorrow"—an injunction against which the daughters of Eve had always rebelled.

THE LAVOISIER MEDAL.—I hear that M. Berthelot, the well-known chemist, and one of the permanent secretaries of the Paris Academy of Sciences, is taking steps to carry out a resolution of that body to distribute annually a gold medal in memory of Lavoisier. M. Paulin Tasset, the engraver, is preparing the die of the medal, and has taken as a model a medallion of the great chemist in profile by David d'Angers. The inscription will be of the simplest nature. The name "Laurent Lavoisier" will appear under the profile, and on the back of the medal the words "Institut de France, Académie des Sciences, Médaille Lavoisier." The medal is likely to become greatly prized by chemists, and will be given for distinguished chemical research. It will be awarded for the first time this year by the Academy of Sciences, and its annual distribution is assured by a balance remaining over from the subscription for the monument, which was unveiled last summer behind the Madeleine Church, Paris.

PHARMACISTS AND THE NEW ALCOHOL-TAX.—Last month I had occasion to refer to the new alcohol duty which came into operation in January of this year, and mentioned on good authority that pharmacists would have to submit to it. The matter has, however, been the subject of a good deal of protest on the part of pharmacists as a whole; some of them have taken the payment in good part, as the additional tax is not large, while others have refused to pay it on the ground that the excise authorities are not quite sure of their rights. A member of Parliament, M. Lepez, has taken the question in hand, and has petitioned the Minister of Finances to define exactly what the position of pharmacists is. It seems likely that purely-medicinal preparations will not be taxed, but that all others containing alcohol will have to pay the duty, and of course perfumery is included in this latter category. As showing how things are sometimes done over here, it is not without interest to recall the increased excise duty that was introduced in October, 1898, but was rescinded after one or two lawsuits that went against the authorities, as it was shown that the duty was illegal owing to certain formalities in imposing the tax having been omitted. The new tax of January 1 now replaces this. A good many pharmacists are now trying to obtain the return of the duty on alcohol paid in the autumn, and some of them have succeeded, but they mostly find, as is my personal experience, that it is much easier to pay out in such a case than to obtain reimbursement, in fact "more blessed to give than to receive."

American Notes.

IN FAVOUR.—The local Druggists' Associations in New York have canvassed the trade in the Greater New York district with a view to discovering the favour likely to be accorded to the plan of the National Association of Retail Druggists to stop cutting. The plan has been endorsed by more than 98 per cent. of the trade. The figures are as follows:—1,439 druggists were visited; 1,323 were favourable, 25 were against the plan, 44 were in doubt, and 34 were not to be seen when the canvasser called. The schedule of

prices for medicinal proprietary articles adopted by the committee and approved by the druggists is as follows:—

All 5c., 10c., and 15c. articles, full price; all 25c. articles, not less than 20c.; all 35c. articles, not less than 25c.; all 50c. articles, not less than 45c.; all 60c. articles, not less than 55c.; all 75c. articles, not less than 65c.; all \$1 articles, not less than 85c.; all \$1.25 articles, not less than \$1.10; all \$1.50 articles, not less than \$1.25; all \$2 articles, not less than \$1.75.

Infants' foods and beef-extracts are not included in this list. A meeting of the Executive of the N.A.R.D. was held on January 14, at Chicago, in which city efforts are now being made to enforce the plan as in New York. In Chicago the retail druggists of each ward will form an Association, and agree practically to observe a uniform price-list. Efforts of a similar character are likewise being made in Baltimore, Boston, and other cities. The Executive Committee and officers of the N.A.R.D. were entertained to dinner while in Chicago by Mr. H. L. Kramer, manager of the Sterling Remedy Company, who presented a cheque for \$4,342 to the treasurer of the Association, in fulfilment of a promise made that he would contribute one dollar for every ten-dollar order for his firm's Cascarets.

THE PROPRIETARY-MEDICINE TAX.—The persistent effort of leading members of the drug-trade to obtain a repeal of the war-tax on proprietaries are likely at length to prove successful. A Bill is about to be introduced into the Legislature to reduce revenue taxation, and a delegation, comprising Mr. E. C. De Witt, of Chicago (representing the proprietary-owners), Mr. S. N. Kline (of the Wholesale Druggists' Association), Mr. W. Anderson (President of the N.A.R.D.), and others, have been in attendance at Washington to place their views before the Committee in charge of the Bill. Their efforts have been so far successful that Senator Aldrich, Chairman of the Committee, has agreed to place before the Committee the suggestion that they should make the basis of taxation 1 per cent. upon the retail price of the article rather than reducing by only one-half the present basis of 2½ per cent. on the retail price. It is not anticipated that total repeal of the tax will be obtained, but the reduction is a step in that direction. Foreign synthetics will be taxed, and all importations omitted by the present law will also be. The only exemptions will be "Articles compounded from the United States Pharmacopœia or National Formulary," provided these are not advertised or held out to the public as a proprietary medicine.

THE CUTTERS' COUNTERBLAST.—The ways of the cutter do not differ materially in any country. The *New York Herald* of January 27 has the following advertisement by the Seigel-Cooper Company (the Whiteley of America), in a prominent position in its columns. It is *à propos* of the anti-cutting campaign (*C. & D.*, January 19, page 106):—

The retail druggists have formed a combination to prevent price-cutting. Druggists are brought up on the big-profit plan—that's the only way they are taught to do business—that's the only way they know.

The agreement—which, as we hear, has received the signatures of 99 per cent. of all the druggists in greater New York—compels each member to adhere strictly to a certain arbitrary percentage of profits, and expects you to submit peacefully.

You would have to, were it not for the Big Store and a few other up-to-date establishments—and to give you an idea of what these differences between our prices and the retail druggists' amount to we name a few goods covered by their new agreement:—

	Makers' List Price.	Drug-stores' Lowest Price.	The Big Stores' Price.
Carter's Little Liver Pills ...	25c.	20c.	13c.
Ayer's Hair Vigor ...	\$1.00	85c.	74c.
Paine's Celery Compound ...	\$1.00	85c.	72c.
Lydia Pinkham's Compound ...	\$1.00	85c.	69c.
Gude's Pepto-Mangan ...	\$1.00	85c.	74c.
Wampole's Cod-liver oil ...	\$1.00	85c.	71c.
Scott's Emulsion, small bottle ...	50c.	45c.	35c.
Scott's Emulsion, large bottle ...	\$1.00	85c.	65c.
Syrup of figs ...	50c.	45c.	37c.
Omega oil ...	50c.	45c.	37c.

Of course, this is but a fragmentary list. There are hundreds of other articles equally affected, and on all of which you will save money by coming here for them.

There is a certain hackneyed familiarity about this method which becomes wearisome.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE Council met on Wednesday, February 6 at 67 Lower Mount Street, Dublin, the President (Mr. George Beggs) in the chair, the other members present being the Vice-President (Mr. Bernard), Mr. Grindley (Hon. Treasurer), and Messrs. Kelly, Brown, Porter, Simpson, and Wells.

THE DEATH OF QUEEN VICTORIA.

THE PRESIDENT said that since the last meeting of the Council the Empire had received a shock by the death of their late beloved Queen Victoria. Immediately on hearing of it, he took upon himself to order a telegram of condolence conveying their feelings to be sent to his Majesty King Edward VII., trusting that his action would be fully approved of by the Council.

Mr. FERRALL, the Registrar, read the text of the telegram, and also the reply which had been received as follows:—

The Private Secretary is commanded to convey the thanks of the King for the kind expressions of loyalty and sympathy contained in the message which you have forwarded to his Majesty.

The reply was ordered to be inserted in the minutes.

ANOTHER SCHOOL REFUSED.

A letter from the Secretary of the Royal Academical Institute, Belfast, forwarded particulars of the classes carried on in that institution. These, it was stated, were held from 6 P.M. each day of the week, except Saturday, when they began at 1 P.M., and were for botany, materia medica, theoretical and practical chemistry (including pharmaceutical), and practical pharmacy.

THE PRESIDENT said this letter was an answer to inquiries which had been ordered by the Council.

THE VICE-PRESIDENT said there was a resolution on the books that the number of schools already on their list for recognition should not be added to, and he did not see why it should not be adhered to.

A reply was ordered to be sent that the Council did not see their way to adding to the list of recognised schools.

MEMBERS RESIGN.

Letters resigning membership were read from Dr. W. P. Connolly, of Mitchelstown, and Sir Thomas W. Robinson Bart., of Kingstown.

THE PRESIDENT said they were very sorry to lose Sir Thomas Robinson and he proposed that they should ask him to reconsider his decision, and that they should make a similar request to Dr. Connolly.

Mr. BROWN seconded the motion, which was agreed to unanimously.

COUNTER-PRESCRIBING.

A letter from Mr. Samuel Hogg, of Shankhill Road, Belfast, urged the Council to take action against the practice of counter-prescribing. The extent to which the practice prevailed in Belfast was, he said, enormous; and if the Council wanted information on the subject he referred them to the Coroner of the city.

THE PRESIDENT: We have never countenanced the practice of counter-prescribing.

THE VICE-PRESIDENT suggested that a resolution should be passed condemning it.

Mr. WELLS asked what was "counter-prescribing"? The difficulty was to define it. In England the other day a man gave a woman a little ipecacuanha and squills for a cough, and the result was that he was afterwards dragged up for manslaughter. He maintained that a pharmaceutical chemist might give a cough-bottle if he was asked for it; but what the law prohibited was his attempting to diagnose the case.

Finally, on the motion of the VICE-PRESIDENT, the following resolution was passed:—

That this Council does not recognise counter-prescribing by any of its Licentiates, and asks the assistance of its members in putting down such, if it does exist.

CORRESPONDENCE.

Letters were received from Sir Edward M. Hodgson and Sir Thomas W. Robinson acknowledging the congratulations

of the Council on the honours of knighthood conferred on them. Sir T. Robinson, in his letter, assured the Council that he duly appreciated the fact of his being the first member of the Society who had attained such a distinction.

A letter was also received from Mr. John Gordon, K.C., M.P., thanking the Council for their congratulations on his election as a member of Parliament.

THE TULLAMORE CASE.

A letter was read from Messrs. Casey & Clay, solicitors to the Council, in reference to prosecutions at Tullamore. The letter stated that Delany, an assistant of Messrs. P. & H. Egan (Limited), had been fined 5*l.* without costs for an unlawful sale of poison, but that the case against the company had been dismissed with 2*l.* costs against the Society, the Magistrates holding that the word "person" did not include a body corporate. The solicitors desired to know whether they should call on the Magistrates to state a case.

Mr. WELLS said this was one of the grossest cases that had ever come before them. The summons was first brought against the assistant, and the Magistrate refused to convict because, he said, it should have been brought against the company. In order to give him his way they issued a fresh summons against the members of the company, and took an appeal in the other case to the King's Bench, who referred it back to the Magistrate to be heard. The Magistrate, finding that he had to convict the assistant, did so without giving costs to the Society, and he dismissed the case against the company with 2*l.* costs against the Society. The Law Committee had gone into the matter fully, and had decided to direct Mr. Clay to appeal against the decision of the Magistrate.

OTHER BUSINESS.

Donations were received from the British Pharmaceutical Conference of a copy of their *Year-book* for 1900; from the American Pharmaceutical Association of a copy of their *Proceedings* for 1900; and from the Director of the Wellcome Chemical Research Laboratories of copies of pamphlets. Thanks were voted to the donors.

The Examiners' reports showed that at the last Preliminary examination 25 candidates presented, of whom 12 passed; that at the Licence examination 13 presented, of whom 8 passed, and of the latter number 6 had passed through the schools of the Society; that in the Registered Druggists' examination in Belfast 6 presented and 4 passed; that in the Dublin Registered Druggists' examination 4 presented and 2 passed; and that at the Pharmaceutical Assistants' examination one candidate passed.

THE PRESIDENT said the Hon. Treasurer (Mr. Grindley) was of opinion that the attendance of students at the Theoretical Chemistry school should be made compulsory.

Mr. BROWN: That can hardly be done before October 1 next.

Mr. GRINDLEY said he would give notice of a motion on the subject for the next meeting.

The following gentlemen were elected members of the Society:—Messrs. Richard Blair (Cork), Hugh Crail (Belfast), Harry Hoskin (Bandon), and Samuel Hogg (Belfast).

The Council then adjourned.

PRESERVATIVES NOT ALLOWED IN BRAZIL.—The Brazilian Minister of Finance, having been informed by the Brazilian Consulate in Paris that the Paris Court of Cassation had decided that it was illegal to use boric acid in butter as a means of preservation, has responded that the said fact can exercise no influence in Brazil, whose legislation forbids the use of such substances in liquors and foodstuffs.

UTILISING VEGETABLE PRODUCTS.—Mr. R. T. Baker, the curator and economic botanist of the Sydney Technological Museum, recently appeared as a witness before a Royal Commission appointed to inquire into the condition of the western lands of the State. He showed samples of eucalyptus oil from trees in the eastern portions of N.S.W. equal to the best on the market. A new dyeing-material, myrti-colorin, and a valuable oil have been obtained from the red stringy bark, and out of other trees and shrubs Mr. Baker has extracted camphor, otto of rose, oil of cinnamon, dyes, oil of peppermint, oil of cajuput and geraniol, which, in his opinion, ought now to be pushed on the market.

Individualism in Pharmacy.*

By JOHN TAYLOR (Member of the Council of the Pharmaceutical Society of Great Britain).

"If the foot shall say, 'Because I am not the hand I am not of the body,' is it therefore not the body?"

The eye cannot say to the hand, 'I have no need of thee'; nor, again, the head to the feet, 'I have no need of you.'"

PAUL OF TARSAUS.

MANKIND has often been classified. There are the divisions of the natural world in which man has been placed by biologists. Besides these there are many arbitrary divisions, settled from various points of judgment. We have "the upper ten thousand" and "the lower millions," the sporting and non-sporting, civil and military, toilers and those who "toil not nor spin," learned and illiterate, and that oldest of all lying under and over-lapping the rest, rich and poor, with its modern name of the "haves" and "have-nots." Of late years yet another division has become widely known—that of "Individualists and Socialists." It is not really a new classification, for it is born of the oldest, but it had to wait for a favourable time to be known and needed. For long ages it was kept out by the hard hand of authority as well as by the ignorance of the power of combination in commerce—a fact well known and acted upon in other directions.

Then a high-and-dry theory of economics, one which thoroughly ignored the "humanity" of men, kept expanding generations blind to the need and value of any fresh sorting-out of economic ideas. But a newer humanism, the pressure of competition, and the ever-increasing complexity of modern life swept away the older economy and brought the opposing ideas face to face, and gave them names—"Individualism and Socialism."

It is not with the economic aspects of this classification that I have to deal to-night, even were I competent, and the politics of economy would be out of place here. But these two names stand for ideals of actions which can be applied to other than questions of social or political economy. I hope you will not think it a far-fetched idea that organised pharmacy is one of such.

These ideals, individualism, and as I prefer to term the other, "Collectivism," are sufficiently well known not to need extended definition. Yet it may be well to glance at them. Taking the last first, it affirms that men are so inter-dependent, and the struggle for existence so keen, that nothing which is essential to social order and existence should be left to private ownership or individual effort or control. Briefly, that whatever is necessary to humanity should be owned and worked by men "collectively."

Individualism is the opposite of this. Its ideal is "a fair field and no favour." Except in such things as are positively necessary for social order and well-being, each man is to be left here, to act, think, and live as he likes. He is to amass wealth, compete with his neighbour, buy at the lowest, sell for the highest, and utilise for self all the chances that Nature, Providence, and the law put in his way. Self-aggrandisement, modified only by his common humanity and the teaching of religion, is the ideal of the strict individualist.

As usual, truth and wisdom do not lie with either extreme. What the collective have to do is to evolve a system of social order which shall win for society the highest value of each individual, whilst it gives to the individual full reward for his work. What we as pharmacists have to do is to see if individualism of action is compatible with a corporate existence.

When we look out and observe the state of things in Britain, for instance, we meet with what seems a startling paradox. We find all masses of men who have interests in common, apparently setting aside in defence of those interests all the doctrinaire ideas they hold on economics. At one time it is the London dock labourers who throw individualism to the winds and go in collectively for a better bargain; then the skilled artisan, ignoring the saying that

a man is a fool who will take less than he is worth, to enable unprofitable workmen to get on a level with him in wage-earning. Then, again, we have large capitalist employers—the class of men to whom collectivism is anathema—sinking their individualism in large trusts and combines, or in resistance to workmen's demands for shorter days or higher wages.

THE PARADOX IS MORE APPARENT THAN REAL.

All these instances are really cases of one set of individual interests against another. The artisan who has half-a-dozen cottages is as big a foe to economic collectivism as the millionaire, but both will sink some of that hatred to collect with others in defence of their individual interests. It is easier far for men to act thus than for any retail trader such as the pharmacist. It is conceivable that artisan and millionaire, apart from their private property, have each valuable interests to defend. It is inconceivable that two private traders in the same line, in competition with each other, should on any occasion be unable to act together. In ordinary times it was, and apparently is now, by many thought to be so. Hence individualism in pharmacy has had its free fling and been its bane. If I have an opponent a hundred yards away, there will be a certain bulk of trade open to both of us. Beyond that margin I shall succeed at his expense or he at mine. Our interests will be diverse, and self, with all its powers to disjoint and separate, will come in. "Self," says a modern speaker, "magnifies and distorts everything," and too often in the history of our craft, self has come to distort facts and magnify differences until some danger from without threatening to overwhelm has hammered ourselves or our forbears into a temporary oneness. But with the passing of the danger too often has disruption and secession come, and pharmacists have resumed their normal state of individuals working individually.

This it was that led directly to the formation of the Pharmaceutical Society. When the growing prosperity of the druggists alarmed the old apothecaries, the apothecaries devised various plans to trim their claws lest they laid hold on too much of their privileges. Jacob Bell has left on record how each time the apothecaries tried to cramp and repress the growing ranks and practices of pharmacists, the pharmacists, those of London principally, sturdily met and fought their opponents. But an attack repelled, the repellers "each betook himself his several way," until the danger became so great that the conviction was at last forced on the leaders of pharmacy that only a permanent society could adequately defend and extend the interests of their craft. So we got our first permanent effort at collective advancement of pharmacy. But it cannot be said that all has been done that might be, nor that the principle of collective effort has received the general adhesion of pharmacists. It seems to me to be of the highest importance that the principle should be agreed to and acted on by all.

IT WILL NOT DO TO BE BLIND TO DIFFICULTIES.

Still less will it do to be overcome by them. Without doubt the greatest difficulty lies in the opposition of personal, and so far selfish, interests. It is hard to work in society with a man who looks upon you as a poacher on his trade-preserves; who will not close until he has seen your lights out—who will accede to no holiday if he thinks it will spite you—who persists in the most selfish interpretation of individualism. But this type of man is getting scarcer, I think. The pressure of life is extinguishing him, albeit slowly, and I think most specimens will give way to the frank advances of a friendly visit and the suggestion that while fighting each other for the neighbourhood's custom the fight might as well be made as agreeable as possible. Such men as this won over, it is possible for the pharmacists of any locality to meet and combine for the promotion of common interests.

Another difficulty—some say the greatest—is the apathy, the utter indifference of large numbers of pharmacists as to what others are doing, or what becomes of them. This is individualism run mad. It affects many who are not in themselves what you Yorkshiremen call "awkward types." They are so self-contained and self-sufficient they either know not or care that there are others who need them. It is as though, to quote the words at the beginning of my

* An address delivered to the Bradford Chemists' Association, February 13.

address, "the fool should say, 'Because I am not the hand, I am not of the body'; or the eye to the hand, 'I have no need of thee.'" Such men take a very narrow view of things, if they take any view at all. They entirely overlook the changes and chances of trade life. They forget or never think that the strong man of to-day may be the cripple of to-morrow, or that those who now triumph over all competitors may beget children whose lot it will be to go down before some new turn of the battle. How shall we deal with such? I fear nothing but the presence of a great danger will rouse them to the abandonment of extreme individualism, and I think the danger is here.

But before I deal with that point let me speak of one aspect of individualism in pharmacy of which I thoroughly approve, lest the critics fall upon me and maim me.

It is a mere commonplace to say that all progress in art or science is the result of individual achievement. Even in the world of thought and politics, as distinguished from industrial or artistic advance, every step forward has originated in an individual. Sometimes he has been in advance of his time, and always he has needed the weight of masses of men behind him; still, the idea has been born in one man's brain. Providence does not send ideas to men in the mass: the same power has ordained that by individuals shall be cut out on the hard path of progress the steps by which others are to follow.

PHARMACY IS NO EXCEPTION TO THIS RULE.

Whether we take the cases in which the earlier pharmacists, by setting before themselves a high standard of purity in their goods, were led to devise methods of production and improve processes, or the more modern plan by which a wholesale house places its laboratory in the hands of an expert, the result is the same—by means of an individual progress is made. That is the right kind of individualism, and it is far from me to do or say anything to belittle or check it.

Nor, again, am I wishful to plead for the forsaking of the practice of individual ownership of businesses. Rather the opposite. I know it may be urged against me that if collectivism means anything, it means that ownership should not be individual—should be, in fact, as the name implies, collective. But neither the world nor ourselves are ready for that yet. Still, I think it is clear that, in common with all trading occupations, pharmacy is considered a fair field for the working of those combinations of investors or capitalists, the limited companies. This is a method of commercial and industrial action which will increase—until some day, far distant perhaps, it breaks down of its own weight.

This seeming by-path has led me back to the danger of which I spoke. It is this. I believe we are within measurable distance of losing the principle, as we have lost the practice, of qualified ownership of pharmacies. I have no desire to be alarmist, I only wish to indicate the trend of things. For many years now pharmacy has been carried on by limited companies—that is, by qualified men in the employ of unqualified persons. The decision in the London and Westminster Supply Association case laid it down that the law could not prevent it. Now after years of argument and some inaction, we have decided as a society to so far agree with it as to regulate it and bring it within the scope of the Pharmacy Acts. Several judges, both here and in Scotland, have given opinions to the effect that they thought, if the public safety was provided for by the presence of a qualified man, it mattered little who owned the shop. To that extent qualified ownership of pharmacies is gone now. It is difficult to see, if twenty or two hundred unqualified men may exploit one or more qualified men, why one man, with sufficient capital and the will, may not do also.

There is one answer—to my mind a conclusive one—to such a contention, and it applies equally to companies and individuals. In our new Bill we provide that each "open shop" shall be under the "control" of a registered person. My answer to the before-mentioned arguments is that

NO EMPLOYÉ CAN BE IN EFFECTIVE CONTROL.

I do not think that at present such an answer is of much use to us. The House of Commons can be severely logical when that course serves its purpose. But it possesses the

habit of doing illogical things when a practical way out of a corner is so to be had. The time may come, probably will, when it will be recognised that for a proper observance of the Pharmacy Acts the person in charge of a shop must be free to obey all the provisions of those Acts without regard to commercial gain, personal interest, or fear of the result. Such an end cannot be met whilst the men practising pharmacy are liable to discharge. I think, then, that whatever may become of the wider pharmacy I spoke of last year at Manchester, we must now look for a means of evolving a class of pharmacists who will practise "individually," and individualism in pharmacy should extend to practice as well as to experiment and progress. In the meantime I would ask the indifferent to consider these points.

There is still another factor to be taken into account. Formerly nearly every man who became a chemist and druggist looked forward to owning a business. It is widely different now.

Speaking a few weeks ago with a friend on these matters, we discussed the number of qualified pharmacists in the employ of the companies. My friend, who should be a good judge, set it down as at least 1,000. I think a large proportion of those who so serve the stores will not consider much going into trade on their own account. For one thing, the very experience they get in the stores unfits most for the slower and quieter trade of a medium-sized business. And a quick trade necessitates larger means and bolder methods than the majority can command. And, above all, service of the companies or large private businesses means freedom from the worries and anxieties of making a shop "pay." For that freedom many gladly give up the independence and chance of greater wealth offered to men on their own account.

This class of pharmacist will, I think, continue to increase so long as there are openings for employment of them. I have heard some expressions of regret that we are not getting so good a class of youths entering the trade as formerly, and I know some people think we are getting a distinctly inferior class. I do not much agree with this view, so far as it affects the character and respectability of those who come. But it is true of their means and power to become owners of businesses. As I pointed out a year ago, the increase of population and the greater efficiency of educational means are forcing into, and educating for, our businesses youths from the industrial classes. Their parents can well afford the cost of qualifying, and having, as we say in the North, "a trade in his fingers," the lad is thought provided for. So I feel sure an increase of this class of pharmacist must be reckoned on.

I have not during the past year changed my mind and become a pessimistic pharmacist. But it were a foolish thing to shut one's eyes to dangers and difficulties. And I think now

OUR PRINCIPAL DIFFICULTIES ARE TO BE FOUND WITHIN,

and can only be overcome by ourselves. On the one hand, we have the indifference of those in business or employment who are not banded together; on the other hand, the growth of a large class of fellow-craftsmen who seek only to sell their qualifications at the highest price and for the best conditions.

Now note, the highest and most powerful interest of all pharmacists is one and the same—to reserve the qualification to individuals, and make it as valuable in all ways as possible. It may seem that the employing pharmacists have an interest at variance with that of the employed. At bottom they have not, for none may tell when he may pass from one class to the other. A shifting and varying difference there may be—the permanent interest is the same. The same danger threatens both. What will meet it? The only answer I have is, The collective strength and action of pharmacists of every rank and description. Whilst those who are in business as individuals are given the fullest chance to exercise individual skill and enterprise, there should be an entire forsaking of the purely selfish individualism which cares nothing for the welfare or advancement of the whole craft. Individualism in the practice of pharmacy; collectivism in its organisation and defence. We might well have a poorer motto than that. Acted upon, it

would bring all the force of an organised trade to secure to individually practising pharmacists such rights and privileges as their qualification properly bestows. At the same time it would, for those who cannot or will not go into business, make the qualification a valuable one, able to repay them fairly for the time, money, and brains used in obtaining it.

I do not hide from myself the difficulty of bringing employers and employed to see that they ought to be banded and act together in defence of their craft. The employer will often want to obtain at the lowest figure the services of a qualified assistant, and will not look agreeably on any plan that helps to raise that figure or mend the terms. The assistant will often think that so long as he can sell his services it matters not to him how the employing trader fares at the hands of unqualified investing competitors. "Self will magnify and distort everything."

Surely, however, both parties can see that there is no real loss by giving up something to obtain solidity and unity, whilst much is gained. Let us look ahead, and whilst doing something for ourselves do also something for those to follow. Put matters at the worst, and suppose the outcome of company-pharmacy was the suppression almost of individual practice of it. Even then the companies need the qualified man. It requires no great insight to see that in such case collective action will secure better terms for the individual than isolated bargaining. And in all legislation affecting pharmacy 15,000 men acting collectively will obtain a better hearing and more consideration than if they adhere to a selfish individualism and act singly, or, what in such case is more likely, do not act at all.

I began this paper with a quotation from Paul of Tarsus—not because it is Scripture, but because it is common-sense. The employing pharmacists cannot afford, even in the moral and political sphere, to say to those who serve, "I have no need of you." Nor will he who, like a free lance, roams from town to city taking a berth here and there, find it to his profit to say, "Because I am not a master I am not of the craft." Each has need of the other, and we shall stand or fall together. A man does not cease to be a pharmacist because he is not in the Society; nor does he cease to need the sympathy and strength of his fellows because he has proudly put up his own sign. In all except the purely local sphere of competition we are, as a craft, interdependent and necessary to each other, and our chances in the local sphere are affected by the attitude and position of the trade at large.

My paper, then, is a plea for the solidarity of pharmacists. I hope I have convinced you of its value. How can it be realised? Only, I think, in a trade-organisation which should include alike employed and employing pharmacists.

You will pardon me, I hope, if I repeat an argument I have used before. It is that men will not combine for an ideal only. History tells of many cases where men have died for an ideal, and others where great masses of men have been fired with enthusiasm for an ideal. But unless the ideal has embodied itself in some form of realism, and led either to achievement or freedom, the enthusiasm has soon died out. Men hate an abstraction. There is, however, no need to fail through this. If I am not utterly mistaken,

THE DANGERS AND DIFFICULTIES ARE INTENSELY REAL.

Now, I hold no brief to-night for the Pharmaceutical Society, and my admiration of it and the men who founded it is not unmixed. I cannot speak to-day with the same freedom as if I were not a member of its Council. Even if I could I do not think I should enter upon criticism of its methods or suggestion as to its improvement. But I will say this: If the pharmacists of Great Britain can devise any plan or organise any other Society which is better adapted to weld all ranks of pharmacy together, I would, for one, not stand aloof. I am enough of an image-breaker not to be deterred from what may be best by misleading cries or a false sense of loyalty to sinew-grown methods. I will say plainly, therefore, that I think our Society offers a point of focus not easily to be reached, let alone excelled. It has a charter; a history of individual and collective effort, of which it need not be ashamed; a source of income no new Association could easily rival; a benevolent fund which is doing a great work of helpfulness; and a standing recognised by the State

and the learned professions alike. These are advantages of great importance, and to lay them aside would be very foolish. Still these things make little impression on those outside the Society, for in the past year the net increase of members is only five. Add to this that not many student-associates join until compelled, and there is cause for thought in all who wish to see pharmacy thoroughly organised and strong. Why is it so? I think because men will approach the question from the wrong side. A man says, "Why should I join the Society? What has it done for me?" I confess it is not easy to tell him. Self magnifies and distorts everything. I think the proper way—a way not incompatible with true individualism—is to say, "What can I do for myself through the Society?" You may tell the man who asks that—everything that men, acting collectively, can do for themselves. Get men to realise that, and I believe the problem will be solved. That would win for each of us the best reward of individual merit, whilst collectively lifting up and advancing our position as an organised body.

Jacob Bell, writing many years ago, said "the most effectual method which any class of men can adopt for securing their political rights and advancing their professional standing, consists not in disputation and warm argument, but in a steady and persevering attention to intellectual improvement, and the establishment of such regulations as are calculated to ensure collective privileges by increasing the amount of individual merit." All I wish to add to that is that the realisation of such an idea demands a united craft and the abandonment of individualism, except in the development of a man's private business.

A friendly critic said of me a year ago that I was no idealist. I think I am. But my ideal is not that of a highly trained and intellectual body of pharmacists compelling the admiration and respect of the world by their individual brilliance and ability. My ideal is a body of men as intellectual and able as the material rewards of their trade or profession will enable to subsist, and so banded together to develop, as far as possible, the individual merit of each and the well-being of all. A band of brothers, if you like, wherein the strong will help the weak, the richer not disdain the poorer, and wherein those who are least fortunate will not envy or be jealous of the successful, but one and all will labour to promote and secure "individual merit and collective privileges."

Recent Wills.

ELLIS.—The late Mr. John Robert Ellis, managing director of Daisy (Limited), has left personalty amounting to 14,300*l.*, which is bequeathed to his widow.

GOULD.—The estate of the late Mr. Frederick Gould, of Millmead, Denmark Road, Kingston-on-Thames, chemist and druggist, and dentist, who died on July 23 last, is valued at 680*l.*, and was proved at Somerset House by Mrs. L. E. Gould, widow, and Mr. H. Dickinson, of Streatham Hill, S.W., two of the executors.

JAHN.—The will of Mr. John G. J. Jahn, of 21 Mincing Lane, and 121 Burnt Ash Hill, Lee, was proved on January 10 by Mr. F. A. Glaeser, of Carpenter Road, Stratford, one of the executors. The estate is valued at 394*l.* 10*s.*

MELROSE.—Probate of the will (dated December 30, 1899) has been granted of Mr. Walter Melrose, of 72 Bootham, York, and late of the firm of Rimes & Co., York, who died on November 2 last. The executors are his nephews, Charles James Melrose and John Melrose, of York, wine and spirit merchants. The testator bequeathed to the York County Hospital, 25*l.*; to the York Dispensary, 25*l.*; to the York Bluecoat School for Boys, 25*l.*; to the York Wilberforce School for the Blind, 25*l.*; to his nephew, Frank Melrose, 2,000*l.*; to his nephews, Herbert, and Walter, and Harrison, and John, and Ernest Melrose, 1,000*l.* each; to his nieces, Emma and Louisa Melrose, 1,000*l.* each; to Arthur and Harry Melrose, 200*l.* each; and to Jessie Kemp, 500*l.* The testator bequeathed the ultimate residue of his property to his said nephew, Charles James Melrose. The net value of the personal estate is 22,011*l.* 2*s.* 4*d.*

SERGEANT.—The will of the late Mr. John Sergeant, chemist and druggist, and many years Boro' Treasurer of Bedford, who died on September 3 last, has been proved in the Northampton Registry by Mrs. Sarah Taylor, testator's sister, who is the sole executrix. The gross value of the personal estate is 2,231*l.* 12*s.* 10*d.*, with a net personalty of 2,205*l.* 2*s.* 10*d.*

Pharmaceutical Society of Great Britain.

COUNCIL-MEETING.

THE meeting of Council, which was adjourned from February 6 in order that the Pharmacy Bill could be presented, was held on February 13. The Council sat for two hours in committee, and then adjourned till the following week. No public announcement was made.

EVENING MEETING.

AN evening meeting was held at 17 Bloomsbury Square, W.C., on February 12. Mr. C. B. Allen (the Vice-President) occupied the chair in the absence of the President. The attendance was not large.

The CHAIRMAN called attention to an earthenware jar designed for poisonous lotions, which had been sent for exhibition by Mr. G. F. Forster, of the Royal Hospital for Diseases of the Chest, and then called upon Professor H. G. Greenish, F.L.S., to read his paper on

THE PERCENTAGE ASH OF VARIOUS DRUGS AND THEIR POWDERS.

Professor GREENISH said the work had been done as leisure presented itself, and with what assistance he could get. Most of the experiments took place previous to and during the summer vacation, and had been supplemented since by further ash-determinations and microscopic work. The Pharmacopœia Committee had asked them to find out how far the determination of the ash of a drug could be used as a test of purity. Analysts had long made use of the ash-percentage as a guide to the purity of foods and drugs, but he was surprised to find that only 13 or 14 per cent. of the drugs of the Pharmacopœia have indications of the ash-yield. In the German Pharmacopœia the proportion is still less. The compilers of the British Pharmacopœia do not appear to have made any serious attempt to deal with powdered drugs, but in the German Pharmacopœia there is a distinct attempt to render the recognition of powdered drugs possible. The object of determining the ash-limit is to exclude adulteration or qualities and varieties not of sufficiently high quality for medicinal use; and it must be remembered that not only could adulteration be accidental and intentional, but there are a number of varieties which it is desired to keep out. If they fix an ash-limit, they must arrange it only for such varieties and qualities as are suited for medicinal use. In obtaining his samples he had submitted them to an expert to determine which were included by the Pharmacopœia description and which excluded, and had only determined the ash-percentage of those which were included. Statements of ash-limits were often deficient in this respect, and consequently of little assistance, as one did not know whether the specimens of drugs used were of proper quality.

CARDAMOM-FRUIT.

In his investigations he had started with cardamom-fruits. It was not, perhaps, the best drug to start with, but it was one for which an ash-limit is stated in the B.P. There are several varieties and grades of cardamoms to be taken into account, and in undertaking this particular fruit first he had already an idea that the ash-figure in the B.P. was not quite as accurate as it might be. Moreover, he already had samples of cardamoms in hand when he was asked to do the work. The commercial varieties of cardamoms are—(1) Mysore, from Ceylon; (2) Malabar (perhaps not included in the B.P., but of such excellent quality that he was inclined to stretch the description and include them); (3) Mangalore; and (4) long wild native cardamoms easily distinguished on account of their elongated shape and dark colour. The samples used for the research he had himself taken from the brokers' trays within the last twelve or eighteen months. He had not included cardamoms which formerly appeared on the market, nor had he included Siam and another, which occasionally come in small quantities. First of all the weight of the fruits was

determined, and then, separating the seeds and the pericarp, the proportion of the one to the other was found. The lowest proportion of seeds was found in a sample of Malabar, which yielded 47 per cent.; the highest in a specimen of Mangalore, 80.8 per cent. The ash was determined by placing the material in a platinum basin under a Bunsen burner and gradually increasing to a moderately red heat. The pericarps yielded a white ash without any preparation, but it was necessary to finely powder the seeds to prevent them spurting. It was not easily possible to burn the ash of the seeds white, owing to the silica retaining particles of carbon. The heat of a muffle-furnace got rid of the carbon, but there was also a loss of carbon dioxide and perhaps other volatile substances. The following is a synopsis of the ash-percentages of cardamoms:—

Official Cardamoms.

		Pericarp	Seed	Fruit	Excess
Maximum	...	12.25	5.54	7.15	1.61
Minimum	...	6.81	3.51	4.30	0.72
Average	...	9.05	4.41	5.58	1.17

Unofficial Cardamoms.

Maximum	...	16.07	13.87	14.25	2.37
Minimum	...	9.25	3.53	5.60	0.38
Average	...	12.46	6.91	8.48	1.57

From the extended tables it was shown that the maximum ash was yielded by Malabar cardamoms, and the lowest by Mangalore cardamoms. The ash-test was probably introduced into the B.P. to distinguish between seed and pericarp; but a difference of 1 per cent. was not sufficient to distinguish the seed from the fruit, so that he concluded it was not possible to distinguish powdered fruit from powdered seed by means of the ash-percentage.

The ash, it would also be seen, was of no use for distinguishing between official and unofficial cardamoms.

Finding the ash-determinations of little use, he looked to see if there were any other factor of use in the determination of purity. The amount of fibre, ethereal extract, and soluble ash suggest themselves, but all these determinations suffer under the disadvantages that they do not identify the drug. When a pharmacist buys a drug in a powdered state and determines the ash, he would not pass it if it fell outside the limits, but even if it fell within the limits he would not be justified in passing it as a genuine specimen of cardamom-seeds at all. It is quite possible to raise and lower the ash of a drug—a fact which the Pharmacopœia evidently takes into account, as in some cases tests are given for starch.

Professor Greenish then gave an interesting *résumé* of the microscopic structures of cardamoms, illustrating his remarks by lantern-slides showing the distinctive features of the perisperm and pericarp, and suggested the following tentative description of the characters of powdered cardamoms for insertion in the next Pharmacopœia:—

Examined under the microscope, powdered cardamoms should exhibit masses of thin-wall parenchymatous cells packed with minute starch-grains and long straight epidermal cells with moderately thick walls, and small cells with very thick reddish-brown walls. The powder should be free from sclerenchymatous fibres or elongated cells, should possess a strong aromatic odour, and yield not less than 5.25 per cent. of ash.

In regard to the introduction of other tests for the quality of cardamoms, he thought the determination of volatile oil would be going too far. If the Pharmacopœia introduces any test for powder it tacitly sanctions the use of a bought powder; then, he thought the quality should be regulated by stringent tests, otherwise powdered drugs should not be sanctioned. It was, he thought, necessary to sanction some powdered drugs on account of the difficulty experienced in powdering. Cardamoms, however, were, easily powdered, and he would oppose the admission of tests for the powder in the B.P. He had classified drugs into the following classes:—(1) Drugs which the pharmacist was obliged to buy in powdered condition, such as senna and rhubarb, which were required so fine and in such large

quantities. For these, tests should be introduced for the purity and quality. (2) Toxic drugs, for which assay processes for the crude drug should be introduced, and tests for the identity of the powder. (3) Other drugs which did not fall within these two classes should, he thought, be left alone.

SENNA.

Professor Greenish then showed a table giving the ash-percentages of Alexandrian, Tinnevely, Mecca, and Bombay senna, also *Cassia holosericea* and *Cassia obovata*, of which the following is a summary:—

	Alexandrian	Tinnevely
Maximum ...	12.95	13.00
Minimum ...	11.39	9.78
Average ...	11.42	

The conclusion to be drawn is that the ash-limit does not yield much information as to the quality of the senna, but it is useful as a guide to the quantity of sand present, as the ash from good senna should be almost entirely soluble in hydrochloric acid. In fixing a maximum of ash for such a drug as senna, the question arises as to whether the proportion of ash is influenced by sifting. Dieterich some time ago read a paper which showed that the smaller the powder, the larger is the proportion of ash. Powdered senna had been found to contain 11.6 per cent. of ash, and the gruff 9.61. In powdering some himself he had reduced the gruff to 7 per cent., and found he had got 13.27 per cent. of ash instead of 13 per cent., the ash being raised by 0.27 per cent. only, an amount which does not make much difference. Moreover, his view was that it devolved on the drug-grinders to give a powder which shall fairly represent the drug ground, and not to give it with a larger or smaller proportion of gruffs than it should have.

The following is the description suggested for insertion in the next Pharmacopœia:—

The powder exhibits fragments of epidermal tissue consisting of polygonal cells, and bearing stomata and hairs or scars of fallen hairs. The stomata are usually enclosed, each between two cells; the hairs are one-celled, thick-walled and warty. It also exhibits groups of sclerenchymatous fibres, which, however, should not be present in excessive quantity. The powder should not yield more than 14 per cent. of ash, which should be entirely soluble in hydrochloric acid.

COLOCYNTH.

The following is a summary of the series of ash-determinations made by Professor Greenish:—

	Pulp	Seed	Fruit
Maximum ...	13.43	5.37	5.86
Minimum ...	9.66	2.15	4.43
Average ...	11.03	3.12	4.85

The Pharmacopœia gives a test for starch which seems an anticipation that the powder may be adulterated. Microscopic structure shows the purity, and after establishing the identity of the powder by the microscope and the absence of several substances, the insertion of an ash figure seems to be unnecessary. If sand were present it would raise the ash by 4 or 5 per cent., and make ash-determination an uncertain distinction between pulp and seed, so that it did not seem desirable to fix an ash figure for colocynth.

Suggested description for the next Pharmacopœia:—

The powdered drug consists of the debris of large thin-walled parenchymatous cells with occasional small vascular bundles. It should be free from starch, and should not contain more than an occasional sclerenchymatous cell, or group of such cells.

Professor Greenish finished by suggesting that tests for the quality of senna and colocynth by isolating its active principles, or taking the amount of alcoholic extract, could be done if they had more hands and heads and time for the work.

DISCUSSION.

The CHAIRMAN, in opening the discussion, said Professor Greenish had made the subject both interesting and understandable. It involved a tremendous lot of work to get the data presented in the tables, and there was a still larger body of work which had not been read. He was quite fascinated with the subject, but, as far as he understood it, the results appeared to be negative. Powdered cardamoms

was not much used, unless as a cake-flavouring or as a poultice for the toothache.

Mr. MARTINDALE admired the rational view Professor Greenish took of the case. He remembered reading, some years ago, in a book called "The Successful Merchant of Bristol," how this merchant was much troubled in his conscience by a barrel of powder in his warehouse, labelled "P.D.," which was merely ground earth for use in adulterating pepper. Intentional adulteration was not, he thought, ever practised now. What they had to guard against was inferior sorts and qualities. Professor Greenish's researches would doubtless lead to good results, but the three examples given seemed to show that ash-results were almost quite negative. He thought there were some positive results, however, as they must remember that there is no analytical process for determining the medicinal value of senna.

Mr. WALTER HILLS said he had listened to the paper with great satisfaction. It showed that work of that character should be carried out in such an institution as theirs. He did not know the exact terms of reference from the General Medical Council, but he thought it was that they were to test certain drugs with reference to their ash, and to see if there were any other tests for their purity. In regard to the gruffs of senna, were they certain that every part of the senna-leaf was not of the same activity? He thought the great thing was to accurately determine what the pure drug should be like, instead of giving tests for impurities and adulterants.

Mr. WILSON said it was a bad principle to admit powders into the Pharmacopœia, and that if pharmacists would not take the trouble to powder their own drugs they would not take the trouble to determine the ash.

Mr. MACEWAN said that, valuable as were these results with three drugs, it would be a mistake to lay down a principle to guide the B.P. authorities until the hundred or more drugs in the B.P. were examined similarly. There was much to be said for microscopic descriptions, and he thought that if they were to be inserted in the Pharmacopœia they might as well put in figures for a square inch of illustration was often worth a page of descriptive matter. On the question of sifting powders he referred to the paper by Mr. R. H. Parker, at the Oxford Conference, in which it was shown that when belladonna-root is powdered, the first part contains nearly all the starch of the root, and consequently a mere fraction of the alkaloids. Powders, too, were usually kept in bottles, and heavier particles had a tendency to sink to the bottom, whilst the lighter ones in many cases adhered to the sides of the bottle. He commended to the workers the methods practised at the Rothamstead laboratories, where hundreds of ash determinations were made in a very short space of time.

Mr. MILLARD said as a distributor of drugs he valued very highly such papers as this; they were simply invaluable. He, however, took exception to the remark that a powder obtained from a house of good standing was not necessarily pure, because he took it that if the purchaser paid a fair price and bought from a respectable dealer he had very good reason to suspect that he had obtained a pure article.

Dr. ATTFIELD said he came to hear Professor Greenish, knowing his power, and feeling certain from the way he had worked on previous subjects that there would be much of interest to hear. Any paper so thoroughly worked out as this had been must influence the way in which similar subjects were worked elsewhere, and procure a superior quality of research for the next Pharmacopœia even than that obtained for the present one. In regard to the propositions of Professor Greenish as to the official recognition of powders, the compilers had never recognised broadly the principles of powders at all. In fact, they had felt it was even impossible to recognise powders in the B.P., and nothing they had since heard had caused them to alter their opinion. There were hints here and there, such as in the case of colocynth, which pointed to some sort of recognition of powders; but they were very few, and only suggestions, not shadowings of principles. It seems quite inexpedient to recognise powders in the B.P. Pharmacists must purchase certain powders, and if they do so they must do it at their own risk. Still, there was no reason why attention should not be given to the determination of ash. Such a paper as the one they had heard com-

municated showed that a very large number of samples of a drug must be examined before an attempt could be made to establish an ash-limit of a plant. The paper had concerned itself with only three substances out of many scores in the Pharmacopœia, and then only with certain classes of articles. There were many other classes, and it was quite impossible that that Society, with the addition of hands and heads, would be able to deal with all the important subjects which are to be dealt with. The example which the Society was setting in pharmaceutical research should be followed up by pharmaceutical associations throughout the country, and by individual workers, some of whom have exceptional opportunities for doing very thorough work. If the next Pharmacopœia was to be a great deal better than the present one, there must be hundreds of workers working for the ten years which would elapse before publication of the next Pharmacopœia.

Mr. JOHN H. HEAP noticed that the ash-average in "Squire" for cardamom-seeds was much lower than Professor Greenish's, and also the figure for colocynth. He agreed with Professor Greenish that it would be wise to allow a small amount of seeds in colocynth, and it was obvious that Squire recognised this.

Mr. HOLMES said he did not see why, if a reference to a picture of a plant is given in the Pharmacopœia, they should not also give a reference to the best microscopical description of the drug. Perhaps Professor Greenish would give the result of his work in book form. The paper was extremely valuable, and should be the means of getting more gentlemen to help in the Research Laboratory. In regard to colocynth, it was practically impossible to separate the whole of the seeds from the pulp on a large scale. It was necessary that some other tests besides the microscopic ones should be given, and there was no reason why the ash should not be given in lieu of better tests. The extractive was not a guide in all cases.

Profcs-or GREENISH, in reply, said the ash-determinations had been made by Mr. Dean and Mr. Hyslop in the Research Laboratory, and he wished to compliment them on the skilful and careful manner in which they had done the work. He did not admit that the results were negative, and thought that as the work enlarged the tendency would be to add ash-limits rather than cut them out. He agreed with Mr. Martindale that accidental adulteration was the most likely, but he knew that in Austria there were manufacturers who made a business of supplying substitutes for adulterating foods. One had merely to order pepper adulterant, and a suitable substance was supplied for mixing with the pepper, and the same in the case of pimento. Some years ago, in working on powdered ipecacuanha, he found that the name of a wholesale house was not always a guarantee of the quality. They were now working on ipecacuanha in the Laboratory, and he hoped to make the results known at a future meeting. The suggestion of adding illustrations to the Pharmacopœia had received attention when the last Pharmacopœia was being compiled. He did not think they would ever get through all the drugs of the Pharmacopœia, but they could start by doing the most important first. They must not attach too great a weight to microscopical work; other tests ought to be introduced, but it should not be forgotten that chemical assays do not afford definite information as to the identity of the powder.

Trade Notes.

TABLOID QUININE BISULPHATE with potassium citrate in effervescent form, is one of the nicest ways of taking the bitter that we have tried. Messrs. Burroughs, Wellcome & Co. put up the new tabloid in tubes of twenty-five, each dose consisting of 1 gr. of quinine bisulphate, and 15 gr. of potassium citrate. As a febrifuge in influenza the tabloid is excellent.

THE company hitherto known as the Tasmanian Eucalyptus Oil Company, with offices at Rochester Buildings, 138 Leadenhall Street, E.C., has, for partnership reasons, been registered under the Limited Liability Companies Acts, and will in future be known as the Tasmanian Eucalyptus Oil

Company (Limited). The management remains the same, and the shares are held by partners in the original concern.

PRICE-LIST.—Messrs. C. J. Hewlett & Son, wholesale druggists, of 40, 41, and 42 Charlotte Street, E.C., have prepared an abstract of the Indian and Colonial Addendum of the British Pharmacopœia, which they are issuing along with therapeutical notes on new drugs and specialities to their customers. They are prepared to supply the new preparations of the addendum as required. The notes include monographs on sodium cacodylate and isphagul. The list is well arranged, and the monographs are concise and useful.

A1 SHAVING-BRUSH.—Mr. Frank Newbery, of 85 London Road, Reading, draws our attention to a useful improvement he has patented in shaving-brushes. As shown in the illustration, the novelty consists in placing a thin celluloid cup between the handle and the bristles to prevent the lather running over the handle. The utility of the idea is apparent, but we have also had the opportunity of practically testing the brush and find it answers the purpose splendidly. The brushes sell at prices ranging from 1s. to 25s., and are made in a wide range of patterns.



A USEFUL PAMPHLET.—Messrs. James Burrough (Limited), of Cale Street Distillery, Chelsea, have issued a nicely printed and most useful pamphlet, giving full particulars respecting methylated spirit. Information is contained in it of the "ordinary" and "mineralised" varieties of spirit, of bonds, forms of application, request notes and permits, together with regulations for retailers and other handy hints. A copy will be sent to any of our readers who care to write to Messrs. Burrough (Limited) for one.

A NEW SWEETENER.—In France and Spain "Edulcorant Porchère" has been recognised as a valuable sweetening product for years. Under the name of "Porchérine" it has now been introduced into this country by Porcherine (Limited), 11 Queen Victoria Street, E.C. It is the discovery of a French chemist, M. Porchère, and the sample before us shows it to be a clear syrupy liquid, colourless, and readily soluble in water, alcohol, or ether, with a neutral reaction to test-paper. It is said to have a sweetening power 250 times greater than sugar, and to possess marked antiseptic and anti-fermentive properties. That being so, it should be found both economical and useful in the manufacture of wines, ciders, preserves, and mineral waters, and it is recommended to chemists for use in the dispensing of preparations in which sugar should be avoided. It should be specially useful in the manipulation of infantile remedies where sweetness is a *sine qua non*, and in the diet of patients suffering from diabetes, glucosuria, or kindred ailments. Dr. Cazencuve, of the Lyons Chemical Institute, certifies not only its harmlessness but its absolute assimilation by the digestive organs, notwithstanding continuous and repeated consumption. Aromatic porcherine in a series of seventeen flavours has also been produced, which are likely to be well taken up by confectioners and mineral-water manufacturers. The antiseptic properties of porcherine are attested by Dr. Bergeon, of the Paris Faculty of Medicine.

SCOTT'S IN VENEZUELA.—The Venezuela Government has entered into a contract with the manufacturers of Scott's emulsion, authorising the latter to establish a factory at the capital, and granting the free introduction into the country of the necessary machinery, bottles, &c. The contract is to last twenty-five years.

GERMAN SACCHARIN-QUESTION.—At the sitting of the Reichstag on February 11, the Secretary of State for the Treasury, in reply to a question, stated that the work for the preparation of a Saccharin Bill was in a very advanced stage, and there only remained some doubt as to whether an increased taxation or the introduction of further restrictions upon the trade was preferable.

Legal Reports.

Pharmacy Act, 1868.

APPEAL AS TO AGENCY.

IN the Court of Appeal on Wednesday afternoon, the case of the Council of the Pharmaceutical Society *v.* White came on for hearing before the Master of the Rolls and Lords Justices Henn Collins and Romer. It was an appeal in respect to the decision of the Worcester County Court Judge (sustained by Justices Channell and Grantham), holding that a florist in that town, who had taken an order for arsenical weed-killer, executed by the Boundary Chemical Company (who paid the florist 25 per cent. commission), had not infringed Section 15 of the Act. Mr. Danckwerts, K.C., now appeared for the Pharmaceutical Council, and argued the case for about forty minutes, when the Court rose until Friday at 10.30 A.M. We hold our reporter's notes of Mr. Danckwerts' speech until he has concluded his argument, and meantime content ourselves with an outline of what happened.

Mr. Danckwerts commenced by stating the facts of the case, taking the defendant's story "because the County Court Judge believed it," a remark which drew from the Master of the Rolls the query, "Why do you sneer at it?" this being the first of many pleasantries which enlivened the argument. Mr. Danckwerts has the reputation of bringing retorts from the bench, and he did not belie it on this occasion. He insisted that Section 17 of the Act should be read with Section 15, and quoted the House of Lords' decision in the London and Westminster Supply Association case in support of that view, pointing out that it is essential in the sale of a poison to conform with the provisions of Section 17. The Boundary Chemical Company could not comply with them, therefore the defendant had to, especially when the provisions of the Arsenic Act are considered. Their Lordships were now busy reading the Pharmaceutical Society's Calendar, volumes of cases, and so on, and the Master of the Rolls had asked for a handbill and the defendant's receipt to be handed up to him, whereupon the agency question was pressed upon Mr. Danckwerts, and Lord Justice Romer asked him what he thought of commercial travellers taking orders for poisons. Promptly counsel stated that they must be qualified persons. He then proceeded to read extracts from the Lords' decision to show that the actual seller of the poison must be qualified, as that is the protection afforded to the public, and as the actual seller is the person who transacts the business with the purchaser, Smith was in the present instance the seller. Lord Justice Henn Collins suggested that an agent who does not actually deliver the poison cannot be a seller—at least completely so; and to that Mr. Danckwerts replied with the Wheeldon case, where the agency question was settled he said, and it required that the actual seller should be a qualified person. Their Lordships did not appear to be convinced, and tried to impress upon Mr. Danckwerts that the Wheeldon transaction was in an open shop for the sale of poisons, but in the Worcester case no stock was kept, and the florist was a mere agent for transmitting the order, not the goods. To this Mr. Danckwerts replied that the statutory provisions regarding the sale of arsenic had to be complied with; here were a purchaser of arsenic, and a person who offered and supplied him with it, for the purchaser had no transaction with the Liverpool company, and he maintained that the person who took the order was the actual seller in the House of Lords' sense.

"Take the case of a boy sent out to take orders," said Lord Justice Henn Collins. "He may or may not get commission for the orders, but he takes them to his employer, gets them executed, and delivers the medicine to the customers. Is the boy the seller? Is he liable?" This was a poser, and Mr. Danckwerts was endeavouring to get out of the corner, when the long hand of the clock came to XII. and the Court adjourned.

The only representatives of Bloomsbury whom we noticed in court were Mr. A. C. Wootton (member of the Council). Mr. Flux (solicitor), and Mr. Harry Moon (clerk to the

Registrar). Mr. Dobbs, the Worcester solicitor who defended the florist, was watching the case, and expressed himself as confident of victory. Appeal Court No. 1 is where the case is taken, and the Carey Street entrance is the nearest way into it. It may not occupy more than half an hour on Friday morning.

THE SELLER'S NAME.

THE decision in the case of Charles Clement Reece, chemist and druggist, of Deptford, who was summoned under section 17 of the Pharmacy Act for selling laudanum improperly labelled (*C. & D.*, February 2, page 210), was given at the West London Police-court on February 13 by Mr. Lane.

Mr. Vaughan Williams appeared in support of the summons on behalf of the Pharmaceutical Society, and Mr. Brooke Little defended.

It will be remembered that defendant has several shops and carries on business under the name of "Squire." The laudanum was purchased at one of his shops at Uxbridge Road. The name on the label was "Squire," and the address was "Goodge Street," where defendant said he resided. For the prosecution it was contended that the defendant should have had his own name and the address of the Uxbridge Road branch on the label. The defence was that the address given was that at which the defendant could be easily found, and that he was entitled to use any name he chose.

Mr. Lane gave a lengthy decision, and was of opinion that defendant complied with the section so far as the address was concerned, but not in regard to the name. He did not think the defendant was guilty of negligence, or had any intention to evade the provisions of the statute, and therefore he proposed to inflict only a nominal penalty.

Mr. Vaughan Williams assented and asked for costs, owing to the considerable expense incurred by the Society.

Mr. Lane imposed a fine of 2s 6d., with ten guineas costs.

Mr. Brooke Little then gave formal notice of appeal on the question as to whether the Act meant an individual name, as it would affect the profession to a large extent.

High Court Cases.

VASELINE AND VASOGEN.

IN the Chancery Division on February 9, the application of E. T. Pearson for the registration of the trade-mark "Vasogen" (under the Patents, Designs, and Trade-marks Acts) came before Mr. Justice Buckley. Mr. Pearson appealed from the Comptroller-General's decision refusing to register the word "Vasogen" in Class 3 in respect of chemical substances prepared for use in medicine and pharmacy, unless the written consent was produced of the registered proprietors of the trade-mark "Vaseline"—namely, the Chesebrough Manufacturing Company Consolidated of New York. Mr. Pearson applied to have the register rectified by the removal therefrom of the trade-mark "Vaseline," which was registered as an old mark in 1877, his objection being that the mark was not, within the meaning of Section 10 of the 1875 Act, a "special and distinctive word used as a trade-mark before the passing of" the Act.

Mr. Fletcher Moulton, K.C., who appeared in support of the motion submitted that "vaseline" was the name of a patented article at the time, the patent of which had since run out. Vaseline was described as a filtration of crude petroleum. The result of the filtration was the material called "vaseline," which appeared as a dense oleaginous substance retaining something of the colour, odour, and taste of petroleum. The result of the applicant's patent was the treatment of this substance in such a manner as to free it from the colour, odour, and taste of petroleum, and to present a purified substance varying in colour from pure white to deep red. This refined filtration was essentially a concentrated jelly of petroleum liquefying at from 80° to 100° F. It was a most useful and singular production, whose purity rendered it capable of many new uses. He contended that a man could not claim the monopoly in the name of a thing if he had once made the word the name of the substance from which he prepared a thing. For these reasons he submitted that "Vaseline" could not stand as a registered trade-mark, and that the applicant was entitled to register "Vasogen."

Mr. Astbury, K.C., opposed the application on behalf of

Chesebrough & Co. This company, he said, had had "Vaseline" on the register as a trade-mark since 1877. Prior to 1875 Mr. R. Chesebrough used the word as a trade-mark. It had come to mean, in the trade, the class of petroleum jelly made by the Chesebrough Company. It had always borne that meaning in England.

Mr. Justice Buckley gave judgment on Tuesday, February 12. He said that numerous authorities showed that, in order that an old mark should be a distinctive word within the section, it must be distinctive in the sense that it referred to the manufacturer of the article, and not to the article itself. Was the word distinctive in that sense when it was registered? That was a question of fact and the evidence on the point was very meagre. In 1865 the respondents' predecessor in title, Mr. R. A. Chesebrough, took out a British patent for an "Improvement in refining Petroleum and other Hydro-carbon Oils," and in his specification referred to the refining of petroleum and other hydro-carbon oils by "filtration through animal charcoal (sometimes called 'bone-black'), wood charcoal, or other filtering-medium." According to the evidence "Vaseline" was a coined word invented by Mr. R. A. Chesebrough in 1871, and applied by him in this country shortly afterwards to his preparations of petroleum jelly. It was so applied before the patents of 1872 and 1874. In 1872 Mr. R. A. Chesebrough took out an American patent, in which he referred to "Vaseline," and the only bearing that patent had on the present case was that it showed that he himself said that what he had invented was called "Vaseline." In 1874, Mr. Chesebrough took out another British patent for "Improvements in Treating Hydro-carbon Oils and Products." In his specification he said:—"This residuum contains no paraffin, but appears to be a concentrated product of the heavier parts of petroleum, and from it a material, which I term vaseline, is made by filtration through bone-black or animal charcoal. . . . My invention is, therefore, adapted to so refining the vaseline as to make it entirely free from the taste, odour, and colour of petroleum." In 1877 did the word indicate the article which Chesebrough made, or did it indicate something which might be made by that or other similar means? He appeared to be describing the goods, and not the manufacturer. The evidence showed that there were other kinds of petroleum jelly before and in 1877 which were not manufactured by this particular firm. Here the principles of "*Linoleum Manufacturing Company v. Nairn*" (L. R. 7 Ch. D. 834) applied. As Mr. Justice Fry said in that case with reference to linoleum, so here it might be said, What were other manufacturers to call the substance unless they called it "Vaseline"? It was not a distinctive word within the Act of 1875, and the application to rectify the register by removing the word must succeed. The respondents must pay the costs of the applicant and the Comptroller.

The enforcement of the order was postponed for some weeks to enable the respondents to appeal if so minded.

An application was then made to register "*Vasogen*" as a trade-mark, but this was refused with costs.

DEIGHTON v. MUNDAY.

In the Chancery Division on February 9, before Mr. Justice Kekewich, Mr. Warrington, K.C., on behalf of the plaintiff in the case of *Deighton v. Munday*, stated that on December 17 last the receiver asked the defendant to make out a list of such goods and stock as were required to carry on the business, and the defendant promised to do so, but he declined to make up the books of the business unless he was paid. The defendant failed to make out the list as required, and in order to prevent the business coming to a standstill the receiver was compelled to ask the qualified assistant in the shop to make out the list. The assistant did so, but the list when prepared was torn up by the defendant, and a second one had to be made out. It was absolutely impossible for the business to be carried on in a proper manner whilst the defendant conducted himself as he did.

Mr. P. Ogden Lawrence, K.C., for the defendant, submitted that if the order of the Court had been loyally carried out by the receiver, no difficulty would have arisen. As it was, the defendant complained that he had been superseded by one of the shop-assistants, and, further, he had not been paid the sum of 552*l.*, which was due to him, on account of the stock-in-trade. Under these circumstances his Lordship was

asked to appoint the defendant as receiver of the takings of the business until he had been paid the value of stock.

Mr. Justice Kekewich, in the result, said he should direct the receiver to discontinue the employment of the defendant as manager, and directed that the costs of the motion should be the plaintiff's costs in the action.

BEECHAM v. BEECHAM.

SIR FRANCIS JEUNE, sitting in the Divorce Division of the High Court of Justice on February 11, had an application made to him in respect to this matter. It will be remembered that Mrs. Josephine Beecham had applied for a judicial separation from her husband, Mr. Joseph Beecham, but afterwards declined to go on with the matter on the ground that she had been unduly influenced. The present proceedings arose from a visit made by the daughter, Miss Emily Beecham, to the institution in which her mother was confined. She was admitted into the place, and after waiting some time was told that her mother had left. Thereupon her solicitors applied for an order to commit Mr. Beecham and the medical superintendents for contempt of Court.

Sir Francis Jeune heard Counsel at considerable length on February 11, when it transpired that the whole matter seemed to arise from a disagreement between Mr. Beecham and a son and daughter. Mrs. Beecham had been acting on information and solicitation of her daughter, and now had no desire whatever to go on with the proceedings, and it had been arranged that she was to leave the institution and go home to her family. The statement of counsel showed that she and her husband lived on affectionate terms, and his Lordship elicited that Mr. Beecham was willing to interpose no obstacle in any way to his wife's free action in regard to her petition. In the result it was ordered that Mrs. Beecham should be brought up to London to see his Lordship privately in reference to the petition, and that Dr. Savage should be requested to report on the best means of having her brought to London. His Lordship said it must be clearly understood that until he had seen her Mrs. Beecham was not to be allowed to communicate with her son and daughter, Mr. Beecham, or anyone else.

BICHROMATE FOR BICARBONATE.

In the King's Bench Division, before Mr. Justice Ridley and a common jury, on February 12, the case of *Wainwright v. Day's Metropolitan Drug-stores (Limited)* came on for trial, it being an action to recover damages. Mr. Kemp, K.C., and Mr. Cagwey appeared for the plaintiff, and Mr. Macaskie, K.C., for the defendant.

In opening the case, Mr. Kemp said the plaintiff, Mr. Alfred Wainwright, was a music-hall performer. In June last year a fellow-artist gave him a remedy for rheumatism, and he went to one of the defendant company's drug-stores, in King Street, Hammersmith, and there asked the assistant for one pennyworth of nitre and one pennyworth of bicarbonate of potash. One of the packets handed to him was properly labelled "nitre," but the other package bore no label. On taking the crystals after he got home, the plaintiff became very ill, a doctor was summoned, and for a time his life was in jeopardy. He endured great agony. It was then found that in place of bicarbonate the assistant had served him with bichromate of potash—a deadly poison. In consequence of his illness the plaintiff had lost a remunerative engagement of 5*l.* a week running over six months, had incurred medical expenses, and for these and for the great suffering he had endured through the negligence of the defendant's servant, he claimed substantial damages.

The plaintiff was called, and supported this statement in evidence, as also did his father and mother.

Dr. Frank Ernest Roch, who had been called to attend plaintiff, said there was not the slightest doubt that the man was suffering from poisoning by bichromate.

Mr. Macaskie: I do not dispute that.

The doctor added that the poison would set up inflammation of the coats of the stomach, which would cause intense pain. It was continual in its effects, and life was certainly endangered.

In reply to his Lordship, Mr. Kemp said bichromate of potash was not on the Poison Schedule, but the Privy Council had power to put a poison on that schedule.

Cross-examined, the witness added that doubtless a good deal of the poison was rejected, but it was very soluble and

there would be considerable absorption before rejection. The danger was from shock to the nervous system, the inflammation set up in the stomach being more or less temporary.

Mr. Justice Ridley: What is bichromate of potash used for?

Witness: In photography it is used, and also, I believe, in dyeing and in electricity. It is not much used as a drug. Photographers use it for sensitising papers, and occasionally it is used in chemistry.

After other evidence for the plaintiff,

Mr. Macaskie, addressing the jury for the defendant, said that undoubtedly a mistake had arisen, and the question for them would be, On whose part was it? The assistant was a young man 29 years of age, who had had twelve or thirteen years' experience in the business, and, therefore, was not a novice. For about two years he had been in the employ of the defendant company. He would be put in the box and he would tell them that he was first asked for nitre, and then the plaintiff said, "I also want a penny-worth of bichromate of potash." The great question would be, Did he say "bichromate" or "bicarbonate"? It was not the case, so he was instructed, that plaintiff told him that he was going to take it, or what he wanted the potash for. The assistant intended to give him bichromate, believing that that was the order which he got, and in the ordinary course of his business he made out a bill to plaintiff for bichromate. The bill was lost, but the counterfoil went to the head office, and "bichromate" was plainly written upon it. The appearance of the two substances was different, and there was nothing to suggest bicarbonate to the assistant unless he was asked for it by plaintiff, who himself made this unfortunate mistake.

William Furner, the assistant referred to, was then called, and gave evidence supporting counsel's statement, and declared that he wrote a label for the bichromate on a poison blank, and to the best of his belief put it on the packet. He had no doubt at all that plaintiff asked for bichromate.

Mr. Kemp cross-examined witness. The following was the style of questioning adopted:—

When plaintiff asked for an active poison without a doctor's certificate, did not you ask him what he wanted it for?—No, it was not an unusual sale.

Do you sell deadly drugs to people whom you do not know without asking for a doctor's certificate?—No.

Do not you get them to sign their names?—We do in the case of poisons on the schedule.

And did you know that bichromate of potash was not on the schedule?—I did.

In further cross-examination the witness repeated that he could not swear that he put the label on the packet.

You were very careless in not seeing that this label was fixed on the packet, were you not?—I suppose it was careless.

Mr. Kemp: And if careless in one thing perhaps careless in another.

Mr. Ernest Alfred Anstin Smith, who was manager of the defendants' King Street, Hammersmith, shop in June last year, said he was having his tea upstairs when plaintiff was served. Cross-examined, he said he recognised that it was proper when a poison was asked to ascertain for what purpose it was wanted, and to warn the customer about it. It would be a careless thing not to put the label "Poison" on a packet of poison.

Mr. Justice Ridley asked if that would not be a question of negligence for the jury?

Mr. Macaskie agreed that it would be so if the poison asked for were actually in doubt, but here the assistant was positive.

Mr. Justice Ridley considered that there was a liability on the defendants not to be negligent.

Mr. Macaskie: Supposing a man goes to Jamrach's and asks for a young tiger, and the beast scratches him. It would be a curious action against Jamrach to say that he ought to have warned the man against the tiger. (Laughter.)

Mr. George Norrie, one of the general managers of the defendant company, said he went to plaintiff's house the day after he took the drug, and told him that he was commissioned by the directors to say that they would be willing, without prejudice and an act of grace, to consider his claim for compensation for the inconvenience and suffering he had been put to.

By Mr. Kemp: He should himself ask a customer what he wanted bichromate of potash for, and tell him it was dangerous.

And would expect your assistant to do the same?—Yes.

Counsel on both sides having addressed the jury,

Mr. Justice Ridley summed up, observing that one possible explanation of the mishap would be that one man said bicarbonate and the other believed that he heard bichromate. It was said that there should have been a label on the poison. Did not the jury adopt that view? It was true that this was not a poison in the schedule, but it was a poison handed to a person whom the assistant knew was going to take the other substance he asked for. Was it not his duty to see that the label he wrote out was affixed to the package? It was proved that the label was not so fixed, by the plaintiff himself, his mother and father, and a gentleman who microscopically examined the wrapper, while the assistant could not say that it was. Plaintiff's evidence was that when he saw the substance he said, "Have you not got it in powder?" The assistant said they had not, and yet did not ask what it was wanted for, it being a rank poison.

The jury found a verdict for the plaintiff, damages 75*l*. His Lordship entered judgment accordingly, with costs.

THE VOGELER ASSIGNMENT.

ON Saturday, February 9, Mr. Justice Channell gave judgment in the action of J. Dulaney and others v. T. Merry & Son, which arose out of the liquidation of the Charles A. Vogeler Company, the point being whether the plaintiff's as trustees under the deed of arrangement could establish in the courts of this country a good title, as against execution creditors to goods in this country, belonging at the date of the assignment to the debtors, without the deed of assignment being registered under the Deeds of Arrangement Act, 1887. The case had been tried on January 25, and his Lordship now gave judgment at great length in favour of the plaintiffs, with costs.

Sale of Food and Drugs Acts.

ARSENIC IN BORAX.

THE adjourned summonses against Dr. Thomas Duncan, Dr. Stephenson, Dr. Brownridge, Messrs. Cockburn (Limited), chemists, and two firms of grocers, for selling borax containing arsenic were heard at Paisley Sheriff Court on February 8. When the cases were called the prosecuting solicitor explained that since they first came before the Court a slight error had been discovered in the analyses, and as they could not stand by the result of the analyses as stated in the certificate, the quantity of arsenic having been lessened, he desired leave to withdraw the complaints. The solicitor for the defendants, Mr. J. M. Scott, in the course of some very strong remarks about the analyst's report, referred to the harm which was done to defendants' businesses by the accusation, and said they (defendants) would have had no difficulty in convincing his Lordship, even in the case in which the greatest amount of arsenic was stated to have been found, that the quantity could not possibly have done harm to even the most delicate organism. Three of the samples implicated had been sent by his clients to Mr. MacDougald, public analyst for Dundee and elsewhere, and the fourth to Messrs. Tait & Co., consulting chemists, Liverpool. According to their analyses, no arsenic could be discovered at all in three of the samples, while in the fourth there was only one-fifteenth part of the amount which the Paisley analyst, Dr. Clark, asserted to be present. One could not help wondering, he said, what the result of those prosecutions might have been if his clients had not been able to face the expense of having an independent examination of the samples; nor was one, he thought, wrong in surmising that as a result of this slipshod procedure many a struggling chemist had in the past been unjustly convicted. Mr. Scott drew the Sheriff's attention to the fact that it was only after Dr. Clark had received a copy of Messrs. Tait's certificate that he decided to check or revise the conclusions at which he had arrived. Sheriff Lyell pointed out that serious charges of that kind should not be brought forward until after the very greatest care had been exercised. He noted that the analyst only took the trouble to check his analyses after his attention had been called to the discrepancy, and

he then discovered that there was a mistake. That was a kind of mistake which should never have been made in such grave proceedings. There was no reason why an analyst in the position of Dr. Clark should not have taken the trouble to check his results before these complaints were served instead of afterwards. He found the defendants not guilty, and awarded each 5*l.* 5*s.* costs.

County Court Case.

AN INSTRUMENT DEBT.

AT the Clerkenwell County Court on February 11, a claim was brought by Mrs. Sarah Ann Seaman against Mr. Ridgway Bentley Chauler, a surgical-instrument maker, of 18 Featherstone Buildings, High Holborn, for the recovery of 10*l.* 19*s.* 3*d.*, balance of account for moneys paid on behalf of the defendant. There was a counterclaim by the defendant for 44*l.* 7*s.*, but after lengthy and involved arguments on both sides judgment was given for the plaintiff on her claim for 10*l.*, with costs, and the counterclaim was dismissed, with costs.

Bankruptcy Reports.

Re JOSEPH REES, 42 High Street, Cardigan, Chemist.

The following are creditors:—

	£	s.	d.
Hearon, Squire & Francis (Limited), London	10	10	3
Hunter, J. H., & Co., Dublin	13	19	0

Re WILLIAM SEARLE PARROTT, 79 High Street, and 61 The Broadway, Queen's Road, Watford, Chemist and Dentist.

The first meeting of creditors took place on February 6, at the offices of the Official Receiver, Temple Avenue, London, E.C. The Chairman stated that the meeting had been adjourned until that day, because at the previous meeting there was not enough creditors to form a quorum. The following creditors were in a position to vote:—Messrs. Barclay & Sons, Limited (152*l.*); Camwal (Limited); S. Maw, Son & Sons (52*l.*); Gros-smith, Sons & Co.; Hodgkinson, Clarke & Ward; Allen & Hanburys (10*l.*); Evans, Lescher & Webb (10*l.*); Eueryl, Limited (5*l.*); and Ford, Shapland & Co. There were several representatives from firms who were not in a position to vote, through having no proxies, and the Chairman said he thought it would be much more satisfactory if creditors would make it a rule to give their representatives a proxy, as by that means it was possible to obtain the views of the majority of the firms interested. The debtor had been already adjudicated bankrupt, and the business before the meeting was the appointment of a trustee. Mr. Barclay, who said he, unfortunately, was the largest creditor, moved that Mr. George White, chartered accountant, of 14 Old Jewry Chambers, E.C., be appointed trustee, to act in conjunction with a committee of inspection, consisting of Mr. George Priddle (Camwal, Limited), Mr. George Robert Barclay (Barclay & Sons, Limited), and Mr. Clarke (Hodgkinson, Clarke & Ward). The trustee's bond was fixed at 500*l.*, and the premium on same was ordered to be paid out of the estate.

Gazette.

Partnerships Dissolved.

Abrahams, H., and Frieze, M., under the style of the Anchor Mineral-water Company, Leeds, mineral-water manufacturers.

Blore, I., and Johnstone, E., under the style of Blore & Johnstone, Manchester, medical practitioners.

Simcox, J. E., and Stead, F., under the style of Simcox & Stead, Blackpool, mineral-water manufacturers.

Wakefield, H., Wakefield, J. B., and Savage, T., under the style of the British Patent Copper Sulphate Company, so far as regards T. Savage, Birmingham, manufacturers of copper sulphate.

The Bankruptcy Acts 1883 and 1890.

ADJUDICATIONS.

England, Richard (carrying on business as R. England & Co.), Mark Lane, E.C., and Woodford, Essex, chemical merchant.

Stead, Eleanor, Farnworth-in-Widnes, Lancashire, chemist, druggist, and grocer, widow.

Deeds of Arrangement.

Earl, Fred Greenwood, 59 Pemberton Arcade, Barlow Moor Road, Chorlton-cum-Hardy, near Manchester, chemist and druggist. Trustee, Henry Steele, 14 Ridgefield, Manchester. Dated, February 1; filed, February 5. Liabilities unsecured, 810*l.* 14*s.* 2*d.*; estimated net assets, 850*l.* The following are

scheduled as creditors:—	£	s.	d.
Cherrington, Elizabeth, Pendleton	499	0	0
Edwards, T., & Co., London	10	0	0
Egan, J. H., Liverpool	12	0	0
Evans, Sons & Co., Liverpool	92	0	0
Gibbs, D. & W., London	18	0	0
Mackie, —, Manchester	17	0	0
Oldfield, Pattinson & Co., Manchester	31	0	0
Payne, G., Manchester	18	0	0
Pemberton, J. H., Manchester	27	0	0
Woolley, J., Sons & Co. (Limited), Manchester	11	0	0

Thornley, John Alfred, trading as Alfreds & Co., 5 Halliwell Road, and 108 Darley Street, Bolton, chemist. Trustee, John A. Palmer, Colmore Chambers, Newhall Street, Birmingham, accountant. Dated, January 23; filed, February 5. Liabilities unsecured, 160*l.* 17*s.* 8*d.*; estimated net assets, 65*l.* By order on terms, composition of 10*s.* in the pound, secured by assignment upon trust, and debtor to pay trustee 15*s.* per week, commencing February 1, to be divided *pro rata* every three months. The following are scheduled as creditors:—

Evening Telegraph Company, Middlesbrough	£	s.	d.
Holstead, T., Bolton	20	0	0
Wilkinson, J. F., Pendleton	76	0	0
	15	0	0

Pharmaceutical Fauna.



The Tropeller.

This species of *Pompon* is characterised by a duraplastic epidermis, active kernel, and ovoid shape. While he is distinct from other members of the fauna in being neither fowl nor reptile, he is "Limited" in flight to the three-steeples region and adjacent counties, and although generally in Coventry, colonelly he is to be found wherever "Defence, not defiance" is the ruling Maxim.

Observations and Reflections.

By XRAYSER.

THE PHARMACY BILL, I gather from the Council report, is to be published in this issue in its legally approved costume. Just as doctors claim a right to assist at our births and deaths, so lawyers insist on preparing all our documents for us, at least so long as we can afford to pay them 6s. 8d. for every seventy-two words or thereabouts. Patiently and humbly we submit to be thus controlled and charged from generation to generation, as if a lawyer had some magical power of understanding and using the English language. If Acts of Parliament so constructed were really always or generally impregnable, there would be reason in the theory of legal experts. But experience has certainly not established this position.

THE OPINION OF THE TRADE in regard to the Bill is not likely to be influenced by any mere changes in phraseology, and so far as I can judge from what has been published, this opinion is as yet hardly earnest enough in favour of the measure to justify any reasonable hope of its success in Parliament. I am not convinced that it is even strong enough to make it prudent for the Council to get the Bill introduced into either House this Session. There is the admitted fact that the members of the Council themselves are only unanimous in regard to their measure in a peculiarly modified degree. It is fair to assume that some have been outvoted on particular points of it, and that all are opposed to one or more of its clauses. This is discouraging to begin with. Then we come to the expressed opinion outside. It can hardly be said that any of the Associations which have discussed the draft have been enthusiastic supporters of it, but most of them have given what they call "a general support" to its proposals. This is true of the Manchester, Liverpool, Leeds, Edinburgh (District Chemists), the Western of London, Preston, Grimsby, North Staffs, Newcastle-on-Tyne, Northampton, Oxford, Southport, Barnsley, Exeter, Birmingham, Wolverhampton, Swansea, and Workington Associations. Blackburn and Bradford disapprove of the Bill. Sheffield and Dewsbury seem indisposed to make up their minds, and Burnley and Halifax, while mostly in favour of its provisions, urge that a test-case should be taken to try the right of companies to use titles, which is tantamount to at least a postponement of the Bill.

DISCOUNTING on the one hand the views of those gentlemen who would follow authority on whatever lines were adopted, and on the other those of the critics who might be relied upon in advance to find faults in all but their own pet schemes, the body of opinion summarised above constitutes a very respectable backing. But it is discriminating—very. There is not much of the Crusaders' fervour about it; and it will hardly be surprising, nor I think altogether a matter for censure, if the Council, only half convinced itself, should hesitate to face a certain strong opposition in Parliament with such a critically minded battalion to depend upon for support. We are not very likely to get into the first volume of Edward VII.'s statute-book any way; but it may be that another year's education will develop our resolution into something more like a winning weapon.

MR. PATERSON'S BILL to consolidate and amend the Pharmacy Acts, which I have had the opportunity of reading, is a most able production and gives evidence of careful study and thought. But its author has not, I think, made out a good enough case to lay before Parliament for

codification of the Pharmacy Acts. There is no strong evidence of misapprehension or confusion arising from our present several Acts, while the attempt to amend as well as to consolidate the law in one long statute would hardly be considered by legislators. Several codifying Acts have been passed in recent years, but they have been endorsed by eminent lawyers, and they have been accepted by Parliament on the assurance of their sponsors that they only declared the law as it existed, and made no attempt to alter it. If it were once realised that a subtle modification of present legislation might lurk in any line of a codifying Bill offered for Parliamentary attention, that alone would suffice to destroy it.

MR. MARTINDALE finds consolation for chemists in the fact that the number of names on the register of chemists and druggists increases a little year by year. It is evidence, he says, that the trade is still worth coming into. Mr. Martindale's philosophy is rather that of Mark Tapley than of the wise man who remarked that "when goods increase, they are increased that eat them; and what good is there to the owners thereof, saving the beholding of them with their eyes?" But the statistics Mr. Martindale quotes are to some extent evidence of prosperity. Comparing the register with the censuses I find that in 1871 there were in Great Britain an average of 2,128 men, women, and children for every chemist and druggist to fatten on. In 1881 the proportion of possible customers had increased to 2,207, and in 1891 to 2,332 per chemist. But, if the population estimates are right, in the last decade chemists have increased rather faster than the population generally—that is to say, there has been more than one new chemist to every 2,332 other people. This we shall learn exactly when the result of this year's census is reported.

THE PHARMACOPOEIA CONTROVERSY and the misunderstandings it may lead to are happily illustrated by the reports and letters in last week's *C. & D.* Mr. A. H. Allen, while he "will not allow the B.P. to be dragged from its position of authority," "sympathises largely with pharmacists." Generally Mr. Allen has earned the right to say this. I do not remember his name in connection with a really frivolous prosecution, and he has several times gone out of his way to prevent such. But last week he was speaking to public analysts, and he would have done a useful service to them, to the statute, and to the Pharmacopoeia, if he had lectured them as well as pharmacists. There would have been no trouble about the B.P. as evidence if public analysts had not themselves used it unfairly. So eager have they been to get convictions that they have hunted through its pages to find discrepancies between the prescriptions it contains and popular custom, where no fraud nor anything like it could be alleged. The prosecutions concerning milk of sulphur, seidlitz powders, soda-water, and white wax have been of this character, and have had the tendency to bring the Act into disrepute. And there is reason to argue that the mercury-ointment case comes into the same category. Powerful evidence can be adduced why the B.P. standard should not be maintained in this case, and public analysts who only seek to secure fair dealing should weigh this.

THE DEFENDANT in the mercury-ointment case provides Mr. Allen with just the illustration he suggests of the pharmacist who is "inclined to be a law unto himself." Mr. Dickens mixes up his contentions in a comic fashion, but his demand for "a heaven of freedom where individual judgment is not scouted" is only a poetical way of presenting Mr. Russell's argument which the High Court Judge rejected. I should not have expected that a demand "a pennorth of blue unction" ever resounded through Mr. Wilson's fashionable and handsome pharmacy in Harrogate, but he knows best. I am sure Mr. Wilson also knows very well that when his aristocratic customers ask for an article in those terms he may give them what he thinks proper—at least, so far as the B.P. is concerned. Blue unction is not yet recognised in that volume.

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Editorial Comments.

Trade Names.

ONCE more the drug-trade of this country has obtained in a single week two legal decisions of far-reaching importance, one being in regard to the practice of pharmacy under assumed or established names, and the other as to the use of the word "Vaseline" as a trade-mark. Both decisions are as surprising as they are, apparently, accidental. In the Pharmacy Act case, to which we now especially refer, Mr. C. R. Reece, a registered chemist and druggist, who trades at several addresses under the name of "Squire" (having acquired the business of a person of that name), was charged under Section 17 of the Act with selling a poison improperly labelled, the ground of the complaint being that the poison was sold in a shop in Uxbridge Road, and the label bore another address—viz., "61 Goodge Street." When the case came before the West London Magistrate, Mr. Vaughan Williams, who appeared for the Pharmaceutical Council, made comparatively little of the address, and much of the fictitious name under which the defendant trades, the result being that the Magistrate has held that the defendant infringed the section in that his own name was not on the label, but that the address of the principal office of the defendant satisfied the requirements of the section. Although this is the first decision of the kind obtained at the instance

of the Pharmaceutical Society, it is not the first time the point has been argued before a magistrate. On October 9, 1877, Mr. W. F. Haydon, Secretary to the Chemists' and Druggists' Trade Association, took proceedings under the section against a person in Birmingham trading as a chemist and druggist, who had bought a local business with firm name of considerable reputation, and continued the business under that name. The plaintiff's case was that defendant sold poison in a packet "which did not set forth the name of the seller." In deciding against the defendant the Magistrates said—

The Act was clear in compelling a person who sold poison to put his name on the label. With regard to a mercantile house, they could trade under an assumed name; there were many instances of that; but they thought the Pharmacy Act made it very clear that a person who sells poisons should put his name on the label.

A similar case was decided at the same time, and at Walsall a fortnight before another trader was also fined for the offence. In all these cases the defendants were not legally qualified to sell poisons; hence the decisions were not so important as that of this week.

There are many registered chemists and druggists throughout the country *bonâ fide* trading under the conditions which have thus been held to be illegal, and it will be advantageous to look more closely at the matter. It may, therefore, be noticed, first, that it is an essential condition of selling or keeping open shop for selling poisons that the person so acting be registered (Pharmacy Act, Section 1). The keeping of the register and the duties of the Registrar, as defined in Sections 5 to 14, clearly demonstrate the great importance attached by the Legislature to the provision of a correct list of the names and addresses of persons authorised to sell poisons; and it may reasonably be inferred that this object is in a measure defeated by the assumption for trade purposes of a name other than that under which the seller is registered. Moreover, since "the seller" is the person registered or authorised to sell, "the name and address of the seller of the poison" required on the label by Section 17, can only refer to the name and address of the seller as they appear on the register. This introduces the apparent anomaly that a registered person having more than one place of business, need only put on his label one address—viz., that on the register. The West London Magistrate has so decided. Last year a South of England magistrate gave a contrary decision, and this is the only point upon which the Pharmaceutical Council is likely to find ground for appeal.

Now the question arises, If it is only legal that a chemist and druggist shall label poisons with the name and address under which he is registered, is he entitled to keep open shop at any other address than that registered? This question, in view of the universality of branch-shop trading, may sound ridiculous; but is it really so? There is no provision in the Act for multiple addresses, and the spirit of registration throughout the Act, including Schedules B, C, and D, is "one man, one address,"—hence it is not unreasonable to say that "one man, one shop" was the intention of the Pharmacy Act, seeing that the act of selling is so closely interwoven with the name and address of the statutory seller. That is a point for consideration. It is certainly not more absurd than the declaration that a man whose register address is in London, and who actually resides there, may, through an assistant, sell poison in Birmingham and label it with the name and London address. Gazing briefly at the other side of the trade-name question, we take it that little need be said about the Bells, Duncan-Flockharts, and other historic pharmaceutical names which are valuable trade-assets. It is not illegal generally to continue such names, nor is it illegal to

assume a name for trade-purposes, and the Pharmacy Act does not prohibit the use of such names; but we do not find in the Act anything to authorise a name which is not on the register being used in connection with titles or the sale of poisons. It will take a clever advocate to convince a High Court to that effect. Many firms in the trade who have inherited or acquired historic businesses make a point of giving on the labels the names of the registered persons who carry on the businesses, and on whose behalf the sale is made. This is the safe and reasonable course to pursue, and an eminent pharmacy-law authority advises us that it is what must be done. We do not go so far as to say that this course should be adopted forthwith, because we fancy there is sufficient force in the trade to back up Mr. Reece in his appeal. It is far too important a matter to rest on a magistrate's decision accidentally obtained, and we suggest that firms directly interested should combine to get the law of the matter thoroughly threshed out.

The "Vaseline" Trade-mark.

THE High Court decision that "Vaseline" is not a proper word for a trade-mark, and the consequent order that it should be expunged from the register, is decidedly surprising. It is, however, known that several manufacturers of petroleum-jelly—other than the Chesebrough Company—have claimed the right to use the word, on the ground that it is descriptive—an assertion somewhat difficult to understand when it is considered that "vaseline" is an invented word, if ever there was one. It is many years ago since we reported the origin of the word. Mr. R. A. Chesebrough, the inventor of the product, seeking for a single word that would express his idea of water-purity in association with oil—in other terms, "water-oil"—took the words *wasser* (German for "water") and *elaion* (Greek for "oil"), and made them "vaseline." It was so called and sold, and ultimately the word was registered as an old mark years after Mr. Chesebrough's title to it was established by common consent. Now the Court has found that Mr. Chesebrough took out a patent (since expired) for the purification of petroleum-jelly, and in the specification he called the article "vaseline," so that it became known by that name, could not be called by anything else, and was thus descriptive and unregistrable. This decision may be upset on appeal, and our remarks upon it must consequently be restricted, but it is only fair to those who may wish to take advantage of the decision, as well as to the Chesebrough Company, to state that the common law-rights of the company are not assailed by the decision, Chesebrough's, or "Chesebrough Vaseline," remains exclusively theirs to use, and the forms of packages or other methods of presenting the article to the public which are peculiarly theirs, and which are by the public associated with Chesebrough vaseline, cannot be adopted for an article of the same character by other traders. In fact, that would amount to colourable imitation, which is the chief right reserved by common law to those who have had to sacrifice trade-marks. We may also note that one fact was not brought out clearly in the debate before Mr. Justice Buckley—namely, that "vaseline" was used as a trade-mark for some years before any patent in respect to it was taken out, and this leaves the exceedingly interesting point to be settled—did the subsequent patenting of the article debar the inventor from the advantages of the Trade Marks Act, in so far as old marks are concerned? However, as the matter now stands, and subject to the appeal, which, of course, stays the execution of the judgment of the Court, "vaseline" as a word is common property.

Saffron as a Medicine.

LAST week Dr. Wynn Westcott at an inquest advised a poor woman to spread the news amongst her neighbours that there was absolutely no virtue in saffron as a medicine. That is what the India Office told the General Medical Council, but saffron is still in the B.P., though debased. Homer sang of saffron, it is mentioned in the Song of Solomon, and is highly spoken of as a medicine by Hippocrates. Dioscorides and Avicenna attribute to it the power of causing immoderate laughter, and stimulating properties have been accorded to it down to recent times. Pharmacists sell the drug now chiefly for the concoction of saffron tea for administering to children with measles. It has always been looked upon as useful in smallpox and measles. Boerhaave, who accords to saffron many extravagant virtues, lays particular stress on its power as an emmenagogue, and thus it got into pil. aloes et myrrhæ. In Sydenham's laudanum (tr. opii crocata) the saffron occurs as a corrective of the after-effects of opium. For centuries narcotic properties have been attributed to the drug when taken in large doses, Avicenna mentioning that a 3-drachm dose is deadly, and Quincy mentions that 5 or 6 gr. has a very sensible narcotic effect. These are probably all traditional statements, and few, if any, the result of personal observation. Early in last century Drs. Alexander and Cullen made some clinical experiments with saffron at the Edinburgh Infirmary, and gave it in doses of $\frac{1}{2}$ oz. a day without effect. From that time the downfall of saffron commenced, and before the century closed it had been banished from nearly every position it occupied as a medicine in the Pharmacopœia. Still crocus remains in the B.P., and a dose is still attributed to the tincture, so that the administration of the drug as a medicine is still orthodox. Perhaps the benefits which mothers attribute to saffron in measles is due in a measure to the injunction to keep the child warm whilst it is taking saffron tea, but it would be interesting to hear from Dr. Wynn Westcott what ground he has for condemning a remedy with centuries of reputation.

Setting an Example.

MR. JOHN WILLIAMS, of Manchester, who is not unknown to our readers as one-time President of the Grocers' Branch of the P.A.T.A., contributes an interesting letter to last week's issue of the *Grocer*, commenting on a proposed special prize-competition at the Northern Counties Grocery Exhibition, for the best paper on the desirability of founding an institute of technical education, granting certificates of proficiency in the tea, grocery, and provision trade, he warmly supports the suggestion that such a competition should be put before the trade. He quotes as the first reason for the promotion of such an institute the first paragraph on page 9 of the Calendar of the Pharmaceutical Society, which says—

The Pharmaceutical Society was established in 1841, for the purpose of advancing chemistry and pharmacy, and promoting a uniform system of education of those who should practise the same, and also for the protection of those who carry on the business of chemists and druggists, and to provide a fund for the relief of the distressed members and associates of the Society, and of their widows and orphans. The original members or founders of the Society were chemists and druggists in the metropolis and provincial towns, who saw the importance of these objects and volunteered their co-operation.

Grocers, he says, were apt to complain of the action of the Pharmaceutical Society in regard to the sale of poisons; but it would be seen that chemists began their Society by first setting their own house in order, and he thought grocers

should adopt a scheme on somewhat similar lines. If the status of the grocery-trade were to be raised, some means should be adopted by which no one could open a shop and purvey food to the public unless he or she had first shown some acquaintance with the ordinary rules and laws relating to the sale of foods, and had some—at least, elementary—knowledge of the composition of foods. He thinks a scheme worked on the lines of the Pharmaceutical Society would be decidedly advantageous. The idea promulgated by Mr. Williams is certainly a laudable one, but we shall watch with interest the inception of the Grocery and Provisional Society of the future.

WANTED.

A few months ago Mr. F. H. Alcock suggested in the *C. & D.* that there is a market for graduated test-tubes if they could be produced cheaply. There are many similar needs which those interested would do well to attend to. The sp. gr. bottle—an apparatus so essential to the ordinary pharmacist—is seldom accurate when new, and the same remark applies to burettes, mixers, and pipettes. Thermometers, too, are often guilty of telling untruths, and quite recently we have seen a barometer made with tubing not evenly calibrated. Tared evaporating-dishes would be another boon. When twenty determinations or more have to be made, it is a lengthy process to sit down at the balance and tare each dish. Such work is done in some laboratories by the junior, but the single-handed worker wants these at hand and reliable.

NO PHARMACY BILL.

The fact that the Pharmacy Bill as revised by the Pharmaceutical Society's solicitors could not be sufficiently advanced to publish this week sounds alarming. We have spoken about the matter to several members of the Council, and they assure us that there is no occasion for alarm. The revision is being done as thoroughly as possible, we dare say, and even in verbal alterations principles are sometimes involved which cannot be lightly disposed of. We presume that it will be generally agreed that there is no hope of getting the Bill through this Session, and that if introduced it will be for the purpose of starting the necessary education of members.

THE OPEN WINDOW.

Mr. James Arthur Gibson, chemist and druggist, Edinburgh, contributes a paper under the above title, to the *Westminster Review* for this month. Some of our readers may remember that two years ago Mr. Gibson wrote to one of the monthlies an extremely graphic article descriptive of the Nordrach treatment of consumption, through which he had been saved from rapid decline and restored to comparatively robust health. As he grows older Mr. Gibson appears to grow more vigorous, and in his advocacy for the open window he is quite an enthusiast. It is perhaps to be expected that anyone who desires to bring about a reform in the ventilation of living-rooms will reflect the methods of the extremist, and Mr. Gibson's writing rather leads one to the conclusion that the open window is the be-all and end-all of his existence. There is, however, ample evidence in his *Westminster Review* paper to show that the other healthful conditions of life are fully recognised by him. Mr. Gibson has made the interesting discovery that Dr. Henry MacCormac, of Belfast, father of Sir William MacCormac was a great supporter of the open window, and as early as 1885 he advocated the fresh-air treatment of consumption. Mr. Gibson pays a tribute of respect to Dr. MacCormac's foresight, and gives some interesting extracts from a book

which was published on consumption chiefly with the view of showing how grand a thing the open window is. While we do not go all the way with Mr. Gibson in supposing that we shall banish disease by keeping our windows open, because we know that without very close attention to other laws of health that would be ineffectual, his crusade against stuffy rooms, and especially unventilated and badly-lighted bedrooms, deserves general support.

PREVENTING ENTERIC FEVER.

The South African war, which drags its slow length along, will be memorable in the history of warfare as less deadly in respect to those who have been killed with modern weapons of precision than as regards the fatalities from preventable diseases. It is notorious that enteric fever has been the scourge of the campaign, and that we have still to find some means of preventing water-borne enteric fever amongst armies in the field. Dr. L. C. Parkes and Dr. Samuel Rideal, F.I.C., read a paper on the subject before the Epidemiological Society last month, in which bacteriological and chemical experiments were recorded on simple means for killing the fever-germs in drinking-water. Dr. Rideal tried various simple bodies, such as dilute sulphuric acid, but he found nothing more effectual than, and so portable as, sodium bisulphate, which not only kills the germs but turns the water into a pleasant thirst-quencher. The soldier is to be provided with about $\frac{1}{4}$ lb. of sodium bisulphate in tabloid form. Each tabloid is to contain 5 gr. of sodium bisulphate, and three are sufficient to sterilise a pint of typhoid-infected drinking-water. The tabloids are to remain in the water for fifteen minutes before drinking. The acid of the sodium bisulphate will be found to render the water more effective in slaking thirst, and when water is not available a tabloid can be used as a thirst-quencher. Sodium bisulphate was found to possess advantages over other suggested addition to water. The human system is tolerant of the dilute acids and the organic acids, which all have an inhibiting effect on the activity of bacillus typhosus. Schumberg's bromine process, as modified by Braithwaite, consists in adding a mixture of bromide and bromate in tabloid form to water, and afterwards adding acid sulphate of soda and potash. If the full quantity of bromine required to effectually sterilise water is used, the product is rather too medicated for dietetic use. Sodium acid phosphate and sodium sulphovinate were experimentally found to be inefficient. The suggestion now put forward seems well worthy a trial, yet representatives of the War Office who were present at the meeting boldly declared that nothing will put down enteric fever during military campaigns. It is curious to note in that connection that generations have proved the utility of elixir of vitriol as an addition to water during cholera epidemics, and the suggested tabloid exactly puts that experience in portable form.

SELENIUM IN BEER.

One of the most striking facts about the recent beer-poisoning cases has been the apparent incongruity between the doses of arsenic taken and the effects produced. Drs. Tunnicliffe and Rosenheim, of King's College, in a paper to the *Lancet*, mention how this fact led them to assume the presence of some poisonous substance which finds its way into the beer along with arsenic. Selenium and thallium suggested themselves at once. Selenium occurs with arsenic in nearly all pyrites and the sulphuric acids prepared from them. Technical operations which remove arsenic do not render the acid free from selenium, and it has been found by these two observers in arsenical oil of vitriol, brewing-sugar and beer. Selenium compounds are highly poisonous and behave much like arsenic. Selenium is precipitated along with arsenic in Reinsch's test, but the characteristic fern or feather-shaped crystals of selenious acid can be distinguished in the sublimate by the microscope. By Gutzeit's and

Marsh's test it is not shown, being precipitated by the zinc and sulphuric acid. A very sensitive reagent for it in colourless sulphuric acid is codeine, to which it gives in the cold a green colour, changing to steel-blue at a warmer temperature. No cases of selenium-poisoning have so far been recorded in man, but in animals there is a great similarity as regards acute poisoning between arsenious and selenious acids. The difference is that wasting in animals poisoned by arsenic practically never occurs; in chronic selenious-acid poisoning it is never absent. Further, in animals tolerance to continued small doses of arsenic is easily obtained, but never in the case of selenious acid.

THE APPRENTICE QUESTION.

A Lincolnshire pharmacist who had advertised in a local paper for an apprentice, received, amongst others, the following reply, which he imagines will interest some of our readers:—

SIR,—Seeing your advertisement in the *Lincolnshire Mercury* newspaper for an apprentice, I beg to offer myself. My age is 18, and my present occupation is as footman. I am wanting a change in occupation, and, should I meet your demands, I will do my utmost best. Awaiting your reply, I am, Sir, yours faithfully.

We like this aspirant to higher things for his commendable desire to better himself; but imagine that 18 is slightly over the age-limit for apprentice-pharmacists to begin their career.

A PHARMACEUTICAL BALLET.

It looks as if the prophecy of Dr. Luff at a recent West-end pharmaceutical festivity as to the probabilities of *ballet divertissement* being one of the features of future meetings at Bloomsbury Square, was not so far out after all. At any rate, we note that a novel attraction at one of the vaudeville theatres in Boston recently was a troupe of "Pharmaceutical girls." Six young ladies, all very pretty, living in Boston, appeared on the stage wearing costumes designed to represent the outfit of an up-to-date pharmacy. The act has drawn to the theatre an exceptionally large number of drug-trade people. A wicked person who has called our attention to the matter suggests that there is in it an opportunity of realising Dr. Luff's prophecy.

Magnanimity.

"They had no desire to put Mr. Strachan to further expense in the matter."—President at the Council-meeting, *C. & D.*, February 9, page 242.]

We know we're in the right, and we *should* have won the fight,

For I had it from the learned Registrar,
And I'm sure you'll all agree, none so deeply versed as he,
Or in legal or in pharmaceutical lore.

He can mass a rhubarb pill, draft a Chamberlain-ic Bill,
Teach a callow country chemist to dispense,
And we hope he doesn't mind, for appeal we have declined
Just to save that poor young gentleman expense.

We've been shamefully abused and most shockingly ill-used,

For, although the Morisonian did his best
To evade the knotty point, soon his nose was out of joint,
For his Lordship would not let a quibble rest.
So he spoofed our little game, showed how puerile, mean,
and lame

Were the arguments; and swiftly shuffled hence
Every laudable attempt, till, dishevelled and unkempt,
We had visions—at that poor young man's expense.

But, so generous are we—full of magnanimitee—
That we waive our rights and leave the matter thus;
And the By-laws we will try to get sanctioned by-and-by,
For the Privy Council fondly dotes on us.
And we'll guard that little clause, and at some convenient
pause,

When the legislative atmosphere is dense,
We will safely slip it through—this is strictly *entre nous*—
It will help to pay the poor young man's expense.

Winter Session.

Notices of meetings to be held are inserted under "Coming Events." If meetings are not attended by reporters, secretaries of associations would oblige by communicating with the Editor.

Chemical Society.

THERE was a very strong muster of Fellows of the Society at the meeting held at Burlington House on February 7. It was a ballot night, and the programme was good. Immediately after the minutes were read, the PRESIDENT (Dr. T. E. Thorpe, C.B., F.R.S.), intimated that at the meeting of the Council held that afternoon

AN ADDRESS TO THE KING

had been agreed upon, and he was proceeding to read the address when Mr. David Howard gave the other Fellows the cue by standing up, and the address was read in deepest silence. It was in the following terms:—

To His Most Gracious Majesty King EDWARD VII.

May it please your Majesty,

We, the President, Council, and Fellows of the Chemical Society, beg leave to approach your Majesty with expressions of deep sympathy in the grievous loss which your Majesty and the Empire have sustained through the death of our revered Sovereign, Queen Victoria, during whose beneficent reign the science of chemistry, for the promotion of which her Majesty granted the Society a Royal Charter, has made immense progress.

We recall with gratitude the leading part which your illustrious father, the Prince Consort, took in securing the extension of scientific knowledge in this country, and especially the great assistance he rendered in the foundation, in the year 1845, of the Royal College of Chemistry (since developed into the Royal College of Science), of which College he became the President.

We desire respectfully to congratulate your Majesty on your accession to the Throne, and most heartily to wish your Majesty a long, happy, and prosperous reign.

We venture to express the hope that your reign may be marked by discoveries in the science we represent not less brilliant than those which have characterised the reign of her late Majesty.

Signed on behalf of the Chemical Society,

T. E. THORPE, President.

W. A. TILDEN, Treasurer.

WYNDHAM R. DUNSTAN, } Honorary

ALEXANDER SCOTT, } Secretaries.

R. MELDOLA, Foreign Secretary.

Dr. W. A. TILDEN seconded the address and it was agreed to unanimously, Professor HODGKINSON saying "God Save the King!"

NEW FELLOWS.

Two Fellows were then formally admitted as members of Society, one of them being Mr. J. Borchmre Harrison, of the Government Laboratory, British Guiana, who was elected ten years ago. The ballot for the election of Fellows was then opened, Mr. C. A. Hill being appointed one of the scrutineers. It was later on in the evening before the result of the ballot was declared, but we may here mention that all the candidates were elected, and they included the following:—Thomas Stewart Barrie, Principal of the West of Scotland College of Pharmacy, Glasgow; Bernard Farmborough Howard (son of Mr. David Howard); Nicholas Henry Martin, pharmaceutical chemist, Ravenswood, Low Fell, Gateshead; and Theodore Henry Page, Research Laboratories of the London Essence Company.

PROPOSED CHANGE OF DAY OF MEETING.

The PRESIDENT then intimated that Mr. Lloyd wished to bring a matter before the meeting, and Mr. LLOYD quickly explained that he wanted to know why the Council had issued circulars in regard to a proposed change of day of meeting, and what were the reasons, if any, for the change?

The PRESIDENT replied that members of the Society had frequently asked the Council whether the Society could not meet on a more convenient day than Thursday, which might have been all right when the Society was founded, as their business and social conditions were different. The Council had thought this a fitting opportunity to test the feelings of the members in respect to the matter, and the Council had not committed themselves in any way. If it was some guidance

that Mr. Lloyd wanted as to how he should vote, he (the President) would be happy to tell him how the voting was going. The meeting, which was enjoying the diversion immensely, welcomed the President's suggestion, and he thereupon stated that more than half of the postcards had been returned, and up to that time the voting in favour of the change from Thursday to Wednesday was as five to one. Mr. LLOYD expressed himself as quite satisfied with the President's reply, and stated that he would now know how to vote.

ACTION OF HYDROGEN BROMIDE ON CARBOHYDRATES.

This was the title of the first paper communicated, the authors being Mr. H. J. H. Fenton, F.R.S., and Miss Mildred Gostling, B.Sc. Some two years ago they showed that when certain carbohydrates are treated with a solution of hydrogen bromide in ether a beautiful purple colour results, and bromomethylfurfural is one of the resulting products. They found that levulose, sorbose, inulin, and cane-sugar give this reaction, and they considered it to be characteristic of the keto-hexoses or bodies which give rise to keto-hexoses on hydrolysis. They also ascertained that bodies of this composition which give the reaction yield a residue which is crystallisable. Some other bodies give a purple reaction somewhat similar, but their residues are not crystallisable, and this is the point of distinction. The authors having now examined a much larger number of carbohydrates by means of a chloroformic solution of hydrogen bromide at a higher temperature, have ascertained that all forms of cellulose yield the characteristic reaction, including the production of bromomethylfurfural, so that they conclude that cellulose is a keto-hexose.

Mr. C. F. CROSS followed Mr. Fenton with a note by himself and Mr. Bevan on the ketonic constitution of cellulose. This was essentially a *résumé* of the literature and knowledge on the subject of cellulose constitution, and supported the conclusions arrived at by Mr. Fenton and Miss Gostling. Emphasising the great importance of their discovery, Dr. HORACE BROWN opened the discussion, but only queried some of Mr. Fenton's figures, which, however, he had misunderstood. Dr. NORMAN COLLIE questioned if the bromine in bromomethylfurfural could be in direct combination with carbon, and thought it might be combined with the oxygen. Mr. Fenton did not agree with Dr. Collie as to that, for whatever the theory might be, the fact remained that he and Miss Gostling had proved the bromine to be where he indicated it on the blackboard. He also protested against the Society using the word "furfuraldehyde," because, he said, "furfural is good enough for most people, and furfuraldehyde is a waste of space." The PRESIDENT, in expressing "the extreme gratitude" of the Fellows of the Society to Mr. Fenton and his colleague for their important communication, reminded the meeting that Mr. Fenton is a member of the Publication Committee, and could therefore get his views in regard to furfural discussed if not carried out. This courteous bit of fun made the Fellows laugh mightily, and Mr. Fenton smiled saturninely. He then read the second paper, by himself and Mr. H. O. Jones. It was on

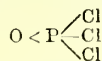
A METHOD FOR COMPARING THE AFFINITY-VALUES OF ACIDS.

Previously the authors had shown that the hydrazone of oxalacetic acid, when heated with water, yields the hydrazone of pyruvic acid and carbon dioxide. With acids sufficiently concentrated the reaction is not parallel, as pyrazolone carboxylic acid is formed, but if the acids are insufficiently concentrated both changes take place at the same time, and the authors have ascertained that the amount of carbon dioxide evolved varies inversely with the affinity-values of the acids. They had said that this is the result of ionisation, but Professor Armstrong did not like that explanation, and they had gone into the matter again on lines suggested by him, but they still thought the ionisation way was as good an explanation as any. The present paper recorded the quantitative results obtained, with the view of showing that measurement of the CO_2 is a practical method for measuring acidic affinity. They especially showed that solvents with different ionising powers give very different results, most carbon dioxide being evolved when water is

used, less with amyl alcohol, and still less with toluene and nitrobenzene. Indeed, if it were possible to eliminate water entirely in the case of toluene and nitrobenzene (some is evolved as a result of hydrolysis) there would be no ionising power at all.

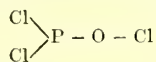
ORGANIC DERIVATIVES OF PHOSPHORYL CHLORIDE.

This was a paper by Mr. R. M. CAVEN, B.Sc., and its object was to show the space configuration of the valencies of phosphorus, assuming that the phosphorus in this instance is pentad as represented by the formula:—



He proposed to replace the chlorine in the above formula with an ethoxy group, paratoluidene, and aniline, and succeeded in introducing them in molecular order, and also in placing each of them in any desired position. He, therefore, concluded that the chlorine atoms are interchangeable and equal, and suggested a pyramidal formula for phosphoryl chloride with phosphorus in the centre, so that it may exist in right and left handed forms.

The PRESIDENT told how, at one time, he investigated the valency of phosphorus in this compound by Kopp's method, based on the specific volume of oxygen, and the results he obtained were in favour of the triad form—viz.,



rather than the pentad form, as in the formula used by Mr. Caven. He had also established the same fact in regard to sulpho-chloride of phosphorus.

Other papers read were one by Dr. LAPWORTH and Mr. E. M. CHAPMAN on " α -Hydroxycamphorcarboxylic Acid," and the last on the "Bacterial Decomposition of Formic Acid," by Messrs. SPAKES and JOLLIMAN. In the latter it was shown that *Bacillus coli communis*, and one or two other micro-organisms decompose sodium formate with evolution of hydrogen and carbon dioxide. Yeasts do not act upon the salt.

Society of Chemical Industry.

MANCHESTER SECTION.

At the meeting of this Section held at the Victoria Hotel on February 8, the proceedings took the form of a discussion on the presence of

ARSENIC IN FOODS AND OTHER CHEMICAL PRODUCTS.

Dr. GROSSMANN, who presided, said he had been disappointed at the methods which were being used for discovering arsenic in foodstuffs. In many cases accuracy and the ordinary principles of analytical chemistry had been sacrificed to the desire of getting results quickly, and with as little trouble as possible. Neither Marsh's nor Reinsch's test was infallible. With the latter test some of the results alleged to have been obtained must have been, to some extent, simple guesswork. It had been known for many years that some of the raw materials used for the manufacture of sulphuric acid contained arsenic; and sugar, tartaric acid, citric acid, acetic acid, phosphoric acid, and glycerin might become contaminated with arsenic if made from contaminated sulphuric acid. Hydrochloric acid made from such an acid was rich in arsenic, and products made from it might contain arsenic. Within the last twenty or thirty years many new products had been introduced into commerce, and were liable to be contaminated with arsenic when contaminated sulphuric acid or hydrochloric acid had been used in their preparation. He need only refer to the large number of arsenic colouring-matters, phenacetine, antipyrin, salicylic acid, boric acid, and saccharin, which were hardly known in technical use twenty years ago. Many new organic colouring-matters and preparations were made with chlorine, or by means of products made by chlorine, such as phosphorus trichloride, or pentachloride, and it was natural to expect that those products might be contaminated with arsenic. These facts should be considered by analytical chemists in their future examinations.

The discussion which followed was of a conversational character. Dr. GERLAND said if there were 2 per cent. of arsenic in pyrites, it would be impossible to get $1\frac{1}{2}$ gr. of arsenious acid in 1 gal. of beer. Marsh's test was very convenient under certain circumstances, but never trustworthy.

Mr. SHEARER said he had found arsenic in what he had regarded as pure hydrochloric acid after the acid had been standing for some time, and wondered whether it was extracted from the glass. It was impossible to get zinc free from arsenic.

Mr. H. MORRIS said he had been at some sugar-works where the manager told him they had got some chemically pure sulphuric acid, but he found, with one exception, every sample contained more or less arsenic. Dr. BAILEY commented upon the prevalence of arsenic in tin ore. Arsenic was a very insidious poison. He had spent three days in trying to get an accurate quantitative analysis of arsenic in one sample of beer. The actual difference between arsenic and its sulphides was not very definite.

Mr. KIRKBY said he was connected with the manufacture of beverages, and his desire had been to find out the most minute traces of arsenic. He showed his new apparatus for detecting arsenic.

Mr. ESTCOURT, city analyst, said a ready method of analysis was necessary for a public analyst. He held the position of a judge. He must be certain of his conclusions. Previously in analysing beer they had looked for probable adulteration—not for arsenic.

Mr. CARTER BELL, public analyst, said he used both Marsh's and Reinsch's tests. He should not have returned $\frac{1}{1000}$ gr. of arsenic in 1 gal. of beer as an adulteration. Mr. KIRKBY said it might not be advisable to extract every minutest particle of arsenic from food-substances.

Optical Society.

At the meeting of the Optical Society on February 5, Dr. D. KÄMPFER (Messrs. Voightlander & Sohn) read papers on "Binocular and Monocular Field-glasses" and "Magnalium." Magnalium is an alloy of magnesium and aluminium, which is coming into use as the metal mounting for prismatic field-glasses and lenses. The alloy is as firm as wrought iron, but its specific weight is only a third that of brass. It can be worked and turned as easily as brass, and screws made from magnalium are very strong, with pure and durable threads.

Röntgen Society.

A MEETING of this Society was held at 20 Hanover Square, W., on February 7, when a paper by Lieutenant F. Bruce on "Experiences of X-ray Work during the Siege of Ladysmith," was read by the SECRETARY. The chief interests in the paper were the expedients adopted to get the storage-cells re-charged, as the town was not supplied with electric light. Lieutenant Bruce had no faith in the system of driving a dynamo by a man on a bicycle, as the work involved in charging six cells was equal to that required to climb a very steep hill. When the batteries gave out they were re-charged by means of the flour-mill near the town-hall, the dynamo brought by Lieutenant Bruce being attached to the mill-shafting. The arrangement worked well, the current obtained supplying electric light to the operating-room by night as well as charging the cells. The X-ray apparatus was employed in 200 cases, nearly half being photographed. For field use an outfit could not be considered complete unless it had its own machinery for the production of electricity. He suggested that an oil-motor such as is used in motor-tricycles might be provided to drive the dynamo.

Chemists' Assistants' Association.

THE usual Thursday evening meeting was held at Newman Street, W., on February 7. Sixteen members were present, and Mr. Dewhirst (President) occupied the chair.

THE PRESIDENT announced the receipt of a letter from Mr. John Milne, of Dysart, N.B., whose son, formerly with Messrs. J. & H. Mathews, of Hyde Park Gardens, had died

in South Africa while serving with the forces as a member of the R.A.M.C. Mr. Milne intimated that he would be glad to receive offers for his son's books and specimens.

Mr. CHARLES HYMANS was then called upon to give his paper on

LENSES.

The word *lens* in Latin means a lentil, the name having arisen from the resemblance of a double convex lens to the seed of the lentil. The theory of lenses depending on the refraction of light in transparent media was then explained diagrammatically in regard to convex and concave lenses. The convex lens was likened to a series of prisms with the bases placed towards the centre, whilst a concave lens was compared to prisms with their apices towards the centre. The six possible forms of simple spherical lenses are (1) double convex, (2) plano-convex, (3) positive concavo-convex or meniscus, (4) double concave, (5) plano-concave, (6) negative meniscus. The grinding of lenses was then touched upon. The glass is first slit up to the required thickness and "shanked," that is, cut into circular shape. The pieces are then roughly chipped into the required curve, after which they are fixed to a chuck on a lathe by means of pitch, resin, or shellac, and the rough curve further advanced. Grinding with emery of various grades of fineness is then done, the last emery working being the one which puts the absolutely true curve on the surface of the lens. The final polish is given with a polisher, a tool coated with pitch or wax, or with cloth upon which rouge or putty powder is distributed. Chromatic aberration, it was explained, is due to the refrangibility of light varying according to its colour, and is the defect especially noticeable in the earlier optical instruments. Newton despaired of overcoming chromatic aberration, but Hall found that different kinds of glass had different refractive indices, which led Dolland in 1728 to combine flint and crown glass in his achromatic lens. The chief form of lenses for the telescope, microscope, photographic-purposes, and spectacles were then explained. The telescope lens originated with Galileo, the first microscope in 1590 at Middleburg, the modern microscope with achromatic objective in 1830; the photographic lens owes its development to the discovery of photography, whilst the use of spectacle-lenses is of very early date. Mr. Hymans ventured the opinion that no class of scientific instruments is so near perfection as those which depend in principle on the lens.

DISCUSSION.

The PRESIDENT, in opening the discussion, said Mr. Hymans had dealt with his subject very lucidly and exhaustively, and he thought that dealing with lenses must be a most interesting occupation. The correction of the various defects involved a great deal of ingenuity, and he was pleased to note that Englishmen took so high a position in this work. It was a most interesting subject for pharmacists, as the more they knew of it the more they could judge instruments, and the better they could talk with their clients in a way that would impress them.

Mr. H. HYMANS asked if the author of the paper could tell them anything about pebble-glasses.

Mr. FOTHERGILL said the paper read offered a good amount of work for study, and complimented the author.

Mr. HYMANS, in reply, said that the crude material for pebble was rock crystal. It was split in a direction at right angles to the axis. Pebble crystals formed round a common axis, after the manner of sugar-candy to use a homely simile, and the best kind of glass was cut round the axis. The advantages of pebble over glass for spectacle lenses were that it was harder, and not so liable to sweat.

The discussion then resolved itself into conversation, and Mr. Hymans sketched the formation of lenses in Galileo's telescopes, afterwards explaining the use and methods of manufacture of a number of expensive specimens of tools and lenses which he showed.

The PRESIDENT moved a vote of thanks to Mr. Hymans which was heartily accorded, and the meeting adjourned.

Bristol Pharmaceutical Association.

THE annual meeting of this Association was held at University College, Bristol, on February 6, the President (Mr. G. T.

Turner) in the chair. A resolution expressing sympathy with the King and Royal Family and the loyalty of the Association to the Throne was moved by the PRESIDENT, and unanimously passed. The HON. SECRETARY having read the Council's report of the proceedings during the year, and the TREASURER having shown by his statement that there was a small balance to the wrong side, the Council of last year was re-elected, with the addition of Mr. W. Cooper, Weston-super-Mare. Mr. G. F. Turner was re-elected President, Mr. George Stroud Treasurer, and Mr. B. Keen Hon. Secretary. The draft Pharmacy Bill was discussed in detail, with the result that in Clause 2 it was suggested that a heavier fine be inflicted in cases of repeated offences. Clause 4 was thought to be the fundamental principle of the Bill. With regard to Clause 5, it was thought that a small annual registration-fee to all but members of the Society might be imposed with advantage.

The paper by Mr. H. E. Matthews on "Practical Hints on Tablet-making" was postponed until the next meeting.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association.

At the meeting held in the Institute, Scott Street, on Wednesday, February 6, Mr. J. P. Gilmour (President), in the chair, Mr. T. S. BARRIE delivered his lecture on "Some Facts about Water." The lecturer dealt mainly with the physical properties of water in a popular manner. Speaking of chalybeate waters, he deprecated indiscriminate use of them. An analysis made by him of a water from a spring near Glasgow showed that it was loaded with arsenic, while the suspended matter contained arsenic in an insoluble form. The arsenic was derived from the oxidation of iron pyrites.

Reading and District Chemists' Association.

FROM a delayed official report of a meeting of this Association we learn that the following resolution regarding the draft Pharmacy Bill was adopted:—

That this meeting of the Reading and District Chemists' Association having discussed the draft Pharmacy Bill, heartily supports the same with the following suggested alterations:—(1) That the following be added to Clause 1, "That the name of the registered person having the control of each shop should appear on the same in a prominent position." (2) That Clause 4 should be struck out from the Bill, it being felt that the retaining of it would hinder the success of the Bill.

Cambridge Pharmaceutical Association.

At the meeting on Friday, February 8, at the Bull Hotel, the PRESIDENT (Mr. A. Sidney Campkin, J.P.) delivered an address, in the course of which, speaking of the

PHARMACY BILL.

he said there was little prospect of that or any similar Bill becoming law in the present Session of Parliament. He felt strongly that the Act of 1868 had not been fairly interpreted and applied, and despite the adverse decision of the House of Lords in 1880, by which limited companies were ruled outside the provisions and responsibilities of the Act, energetic action should have been taken forthwith by their responsible executive either to secure a different position or to so amend the clause of the Act so as to clearly define the meaning of the word "person." As to the Bill, he said it was not for them to encourage the development of, or in any way recognise company-trading in medicines and poisons; hence he was not favourable to Clause 3, and did not think Clause 4 would go through a house in which were so many interested members.

Mr. E. SAVILLE PECK, M.A., considered that it was too late in the day to think about making the practice of pharmacy by limited-liability companies illegal, and while he bitterly regretted its existence he thought the wisest thing to do was to accept the inevitable and try to make the best of it. He explained the clauses of the Bill, and moved that the Association support its general principles.

Mr. H. J. PARSON thought the Bill would be of very little advantage.

Mr. H. F. COOK spoke of the public view of the future

of the chemist, and referred to the growing difficulty in obtaining apprentices. Mr. BERNHARD S. CAMPKIN thought that compulsory membership of the Pharmaceutical Society was needful, and deprecated the suggestion of doing anything to assist in legalising company-pharmacy. Mr. G. MCAVOY did not think the draft Pharmacy Bill would elevate pharmacy, and Mr. C. S. ADDISON did not see a promising future in store on the old lines of the chemists and druggists, and suggested that for profit in business one must look in other directions. He accorded his support to the motion.

Mr. CAMPKIN having replied, the motion was put to the meeting, and carried by a majority of one.

Liverpool Pharmaceutical Students' Society.

THE usual fortnightly meeting was held at the School of Pharmacy, Sandon Terrace, on February 7, the President (Mr. C. W. Cooke) in the chair.

In the absence of any miscellaneous communications, Mr. J. H. WARDLEWORTH was at once called upon to deliver his lecture upon "Jamaica, the Island of Springs." In view of the general character of the audience the lecturer to a large extent abandoned the scientific side of his subject, and gave an interesting account of this "earthly paradise," giving an excellent idea of tropical life. His remarks were illustrated by a series of beautiful lantern-slides, and at the close he was awarded a hearty vote of thanks for the helpful and pleasurable description of his trip to the West Indies.

Dewsbury and District Chemists' Association.

THIS Association held a meeting on February 11 at Dewsbury, and the President (Mr. Stead) presided over a good attendance of members. After allusion had been made to the national bereavement and the recent accession, a communication was read from the Federation of Local Pharmaceutical Associations urging the support to the draft Pharmacy Bill, copies of which the SECRETARY intimated he had received from the Editor of THE CHEMIST AND DRUGGIST.

Resuming the adjourned debate on the Bill, the PRESIDENT was still of opinion that the Bill was one to which they should give their unqualified support. Some of the criticism of the Bill had been exaggerated and extravagant, and considerably overshot the mark. It was not an ideal Bill, but a measure such as had been outlined by its critics was not likely to be ever placed on the statute-book in this ultra-democratic age. He did not agree with the Bill being held over indefinitely in order that a test-case might be taken. He suggested that the following resolution might be moved:—

That this Association, while in general concurrence with the draft Pharmacy Bill adopted by the Council of the Pharmaceutical Society on December 5, 1900, and since amended by the inclusion, in Clauses 1 and 3, of "compounding and dispensing of medical prescriptions," is of opinion that Clause 5 would have been more effective and conducive to a more perfect and accurate register if it had made compulsory annual registration in the form set forth in Schedule "A" of the draft, and also enforced the exhibition in or upon each open shop of the full name and registered number of the qualified person in actual control and management, in addition to the name of the proprietor or firm on whose behalf the business is carried on; and the Association would respectfully suggest the advisability of the clause being amended in this direction.

Mr. R. BROADHEAD said a test-case ought to be taken. Why the Pharmaceutical Society had allowed the abuse of title to continue passed his comprehension. He likened the attitude of the Pharmaceutical Society to an ostrich, which buried its head in the sand, and looked down upon its enemies with mingled feelings of scorn and disdain. (Laughter.) Their titles were portions of their assets. Would the capitalists who exploited pharmacy be willing to share their assets with those who had not earned them? One of the greatest authorities, "X-rayser," of the *C. & D.*, who had the advantage of a free pass through the enemies' ranks, had informed them that every shop opened by a company was property illegitimately acquired. He quite agreed with that, although it was about the only thing on which he agreed with "X-rayser." (Laughter.) If the property was illegitimate, so was the title. The give-and-take policy of 1868, which resulted in a weak and drivelling Act, was being repeated, and the drug-stores and their advocates were

overruling the best men in pharmacy. The absence of education was one of the ruling powers in 1868; to-day it was the education of trade journalism, which had crammed down the throats of the chemists and druggists of the country the extraordinary teaching that the same principles of political economy were applicable to the distribution of both laudanum and lollipops. He moved—

That the Dewsbury and District Chemists' Association desires to urge upon the Council of the Pharmaceutical Society the immediate necessity of enforcing the provisions of the Pharmacy Act of 1868, in cases of illegal assumption of the titles by persons who are not pharmaceutical chemists, nor chemists and druggists within the meaning of the Act.

Mr. S. N. PICKARD seconded, but

Mr. R. GLEDHILL moved, as an amendment, the resolution which the President had suggested. Mr. BROADHEAD thought the two motions did not conflict, but the PRESIDENT held that they conflicted most vitally, and to adopt both would make the Association the laughing-stock of the country. Considerable argument ensued between Mr. BROADHEAD and the PRESIDENT on the subject, and Mr. GLEDHILL asked Mr. Broadhead whether, if the Pharmaceutical Society had adopted his Bill, he would have raised the question of a test-case? Receiving a reply in the affirmative, he then inquired why the question was not raised before he framed his Bill for the protection of the title?

Mr. BROADHEAD said he learned afterwards that his Bill would not do what he thought it would; no Bill that allowed the intervention of companies would protect the title.

Ultimately Mr. Broadhead withdrew his motion, and Mr. Gledhill's resolution was unanimously carried.

Society of Arts.

At an ordinary meeting of the Society of Arts on February 13, Mr. W. THOMSON, F.R.S.E., F.I.C., read a paper on

ARSENIC IN BEER AND FOOD.

Touching first on the distribution in nature and uses of arsenic, the lecturer gave the results of many analyses lately made which revealed the presence of arsenic in various substances. The soot from a kitchen chimney yielded $1\frac{1}{2}$ gr. of white arsenic per lb. Out of sixty-two samples of malt only seven were found to be free from arsenic, one sample yielded $\frac{1}{2}$ gr. of arsenic trioxide per lb., the others ranging from $\frac{1}{32}$ gr. to less than $\frac{1}{300}$ gr. Seven samples of hops were examined, and five contained quantities of arsenic varying from $\frac{1}{50}$ gr. down to less than $\frac{1}{300}$ gr. per lb. The fuel used in drying malt is either anthracite coal or coke, and as these are the probable source of the arsenic in malt they were examined for arsenic; anthracite coal only contained a trace of arsenic, but coke was found to contain from $\frac{1}{3}$ gr. to $\frac{1}{100}$ gr. per lb. Two hundred and twenty samples of beers represented as being brewed from malt and hops only were analysed; twenty-one samples were free from arsenic, one contained $\frac{5}{8}$ gr. of arsenic per gal. the others containing from $\frac{1}{2}$ gr. to less than $\frac{1}{300}$ gr. Mr. Thomson then traced what he thought were the sources of the arsenic. Amongst the substances examined in the quest for the poison were glucoses containing from 1 gr. to less than $\frac{1}{300}$ gr. of arsenic per lb., one sample each of caramel, common salt, sulphurous acid, phosphate of soda, nitrate of soda, metaspulphite of potash, and sulphite of lime contained arsenic, in some cases, however, in mere traces. The history of the Manchester "epidemic" was then entered into, and cases of poisoning from arsenic which had occurred in the lecturer's experience related. At the finish a list of domestic articles examined for arsenic was given. Most of the foods were free from poison, but we noticed a sample of Spanish liquorice was returned as containing $\frac{1}{70}$ gr. of arsenic per lb., and liquorice-jujubes with $\frac{1}{35}$ gr. per lb.

There was an interesting discussion afterwards, among the speakers being Sir Lauder Brunton and Mr. Gordon Salamon. Sir LAUDER BRUNTON detailed the physiological action of arsenic, and gave experience of his own in regard to arsenical wall-paper, which the dealer guaranteed free from arsenic, but which turned out to be laden with it. He thought the

Manchester epidemic would do good by drawing attention to the possible contamination of food with arsenic.

Mr. GORDON SALAMON said it was a mistake to judge of the presence of arsenic in foods by the Manchester scare. The amount of arsenic found in the beer at Manchester was exceptional, and due to accident, so that in judging of the presence of the poison in foods from that standard, they were apt to rush to extremes and cripple an important industry. Brewing-sugar, properly made, did not contain arsenic, and from an examination of a very large number lately undertaken, he found them all free except, unfortunately, the samples used in the poisoned Manchester beer.

Mr. CASSELS made a vigorous speech defending the Manchester analyst against the outcry that he had not detected the presence of arsenic in beer and prevented the poisoning-cases. The public analyst was guided by the Pharmacopoeia dose of $\frac{1}{60}$ gr. of arsenic before declaring a poisonous quantity present in articles he examined. Reinch's test was not sufficiently sensitive for an analyst's use.

Manchester Pharmaceutical Association.

At the meeting held at the Victoria Hotel on Wednesday evening, the President (Mr. Geo. S. Woolley) in the chair, Mr. F. H. WESTMACOTT, F.R.C.S., read a paper on

THE EVOLUTION OF MEDICINE.

He said at the beginning of the twentieth century the sight which was so familiar to them—that of a physician's prescription—afforded food for contemplation, and presented in a developed form the negative image, so to speak, of a series of discoveries, experiences, and theories evolved and propounded almost ever since the advent of human life upon the earth. If they analysed the writing signs and hieroglyphics of such a prescription they were carried back to the dark ages of credulity and superstition, and discerned, even in them, evidences of prophetic wisdom which time in its course had not erased. At the very head of the prescription was the sign of the planet Jupiter—an invocation for blessing upon the compound and its benefit to the sick. That was followed by a series of lines which directed that certain proportions of substances—animal, vegetable, or mineral—should be taken and mixed together, the whole to be designated by a recognised term and followed by directions as to the administration of the final product, all being written in a dead language to enhance the value of the concoctions and to add lustre to the learning of the individual who wrote the magic lines and him who compounded it, as well as to sustain the belief of the human mind, which, even to this day, leaned towards the occult and mysterious rather than to the commonplace and well understood.

The lecturer then gave an historical *résumé* of the rise and advance of medicine from the earliest times, dealing, however, somewhat more fully with modern medicine, especially pointing out the scientific principles which now govern the practice of physic.

The thanks of the members were accorded to the lecturer on the motion of the PRESIDENT, seconded by Mr. KIRKBY.

Bradford and District Chemists' Association.

A MEETING of this Association was held at Bradford on February 12, Mr. R. W. Silson (President) in the chair. There was a good attendance, and Mr. JOHN TAYLOR, of Bolton, read the paper on "Individualism in Pharmacy" which is printed on page 271.

In the discussion which followed,

The PRESIDENT said the fact that there were a thousand qualified chemists employed in the service of companies seemed to indicate that a large number were content with that method of employment. He thought when they reached the high ideal mentioned in the concluding portion of Mr. Taylor's paper they would have arrived at the millennium. Great selfishness had been shown, he said, by the Pharmaceutical Society in their action in connection with the recent law-case, and thought nothing could be more ridiculous than their refusal to accept the certificate of a Master of Arts of one of the British universities.

Mr. WADDINGTON, in moving a vote of thanks to Mr. Taylor, spoke of the necessity of individual character and individual effort in pharmacy. He contended that individualism was at the bottom of every successful organisation,

for it was mainly by the efforts of a few energetic individuals that local associations were organised and kept going. He spoke highly of the unity and absence of jealousy amongst the members of the craft in Bradford, which had been produced by the formation of their local Association.

Mr. JACKSON also commended the paper; but

Mr. H. ROGERSON thought the Pharmaceutical Society might have increased their prestige and secured a higher position in the estimation of the public if they had taken the trouble to get the prefix "Royal" added to their title.

Mr. STEAD (of Dewsbury) also spoke, and

Mr. TAYLOR briefly replied.

Business Changes.

Notices are inserted free in this section if properly authenticated.

Mr. J. MILLET has opened a new pharmacy at 202 White-post Lane, Manor Park, E.

Mr. R. D. HARRIS, chemist, is removing from 55 St. James Street to 30 King Street, W.

BOOTS (LIMITED) are extending their premises at 7 Queen Street, Wolverhampton, by adding the adjoining shop.

MESSRS. JAGG & Co, chemists, are about to remove from 127 Buckingham Palace Road to 18 Eccleston Street, W.

THE business of the late Mr. James Munro, chemist and druggist, Inverurie, has been purchased by Mr. Wm. S. Taylor.

Mr. ERNEST THORP, pharmaceutical chemist, has sold his business at St. Leonards Road, Bexhill-on-Sea, to Mr. R. W. Robins.

Mr. JAMES G. GLASS, chemist and druggist, has acquired the business of the late Mr. J. M. Pirie at 123 Gilmore Place, Edinburgh.

Mr. FRED T. COUPER, chemist and druggist, has purchased the business of Mr. G. W. T. Arrowsmith, at High Street, Whitstable-on-Sea.

Mr. C. W. WINTER, 324 Bethnal Green Road, E., has sold his business to Mr. J. A. Thompson, who will trade under the name of Winter.

Mr. SIDNEY SMITH, chemist, Cambridge Gardens, Hastings, has purchased Mr. E. Ward's business at Elphinstone Road, Hastings.

Mr. WALTER ASTON, pharmaceutical chemist, 27 Montague Street, Worthing, is opening another branch business at Thorn Road, West Worthing.

Mr. C. G. RACKHAM, chemist and druggist, has acquired the business lately carried on at 331 West Green Road, South Tottenham, N., by Mr. G. Morris.

Mr. J. W. WELLS WOOD, chemist and druggist, has taken over the business of Messrs. Lewis & Burrows, at 42 Green Lanes, Stoke Newington, N.

Mr. W. H. SMITH from Mr. F. R. Sergeants, of Nottingham, has purchased the business of Mr. E. J. Chambers, chemist and druggist, at Beeston, Notts.

A NEW branch pharmacy is to be opened at 91 Rochdale Road, Manchester, by Mr. H. S. Lockwood, chemist and druggist, who now carries on business at Harpurley.

Mr. G. BRISLEY, chemist and druggist, Station Road, Bexhill-on-Sea, is opening an elaborately fitted new pharmacy on the sea front, to be known as Wilton Court Pharmacy.

Mr. E. G. BAYLEY, chemist, Seaside Road, Eastbourne, is making extensive alterations in his pharmacy, the shop being made double the size, with a special department for dispensing.

THE old-established chemist's business carried on for many years past by Mrs. Chaston, chemist and druggist, at 82 High Street, Lowestoft, has been acquired by Mr. Robert Moverly, who will carry it on in future.

Mr. F. TUPHOLME (Tupholme & Son), chemist, 1 Coleherne Terrace, Richmond Road, Earl's Court, S.W., has purchased

the business lately carried on by Mr. W. M. Kinross, pharmaceutical chemist, at Battersea Park Road, S.W.

MR. ROLAND PRINCE, pharmaceutical chemist, Longton, Staffs, has now removed from Market Street to his new premises in Stafford Street, which have been elaborately furnished with new fittings, &c., by Messrs. Evans, Sons & Co., of Hanover Street, Liverpool.

MESSRS. BAIRD BROTHERS, surgical-dressing manufacturers, have removed their business (hitherto known as "John J. Findlay & Co.") from 96 to 97 Bath Street, Glasgow, as increase of trade has made it desirable that they should have more commodious premises. Mr. W. S. Baird and Mr. James Baird have for the past five years been the sole partners in the firm of John J. Findlay & Co.

IN consequence of the rapid growth of his photographic department, Mr. J. Griffith Richards, chemist, 58A High Street, Hastings, has found it desirable to open a business at 53 High Street, Hastings, especially for the sale of photographic goods and appliances. Special rooms have been fitted up for giving free lessons and demonstrations to amateurs, a special room being set apart for lady photographers. The new premises are finely fitted up, and are likely to prove attractive to amateur photographers.

MR. W. H. CLUBB, pharmaceutical chemist, 138 Smithdown Road and 4 Greenbank Road, Sefton Park, Liverpool, has issued a businesslike circular in conjunction with Mr. Wm. Jones, chemist and dentist, wherein he announces that he has acquired the retail drug-businesses of Mr. Jones, at 29 High Street and 45 Picton Road, Wavertree, Liverpool, which he will conduct along with his other businesses. Mr. Jones, in announcing the disposal of his drug-businesses, intimates that he will henceforth devote himself exclusively to dentistry at Pembroke Chambers, 13 Parker Street, Liverpool.

Marriage.

PRUST—GROSSMITH.—On February 4, at St. George's, Bickley, Kent, by the Rev. Lewis Carroll, vicar, W. Aubrey Davis Prust, elder son of Mr. W. H. Prust, of Beech Hurst, Sundridge Park, Bromley, to Beatrice, younger daughter of Mr. J. L. Grossmith, of The Grange, Bickley, and Newgate Street, London.

Deaths.

BARNES.—On February 8. Mr. F. W. Barnes, chemist and druggist, Beckenham.

BROMFIELD.—On February 8, suddenly, Mr. Charles Bromfield, chemist and druggist, of Culverland Road, Exeter. Aged 78. Mr. Bromfield was for many years with Messrs. George Cooper & Co. (now Evans, Gadd & Co.), wholesale druggists, of Fore Street, Exeter, and for twenty-one years was manager of the drug department, after which he started business on his own account. Several years ago he retired from business.

DEAN.—On January 31, Mr. Samuel Dean, chemist and druggist, Bow, E. Aged 63.

DOLLING.—On January 31, Mr. Alfred Dolling, chemist and druggist, of 57 Lower Clapton Road, N.E. Aged 50.

FLETCHER.—On February 11, at 58 Park Road, Freemantle, Southampton, Mr. Isaac Brackstone Fletcher, chemist and druggist, formerly of Totton. Aged 83.

FORD.—On February 12, Mr. Edward Beeks Ford, pharmaceutical chemist, Commercial Street, Pontypool, after a long illness. Aged 57 years. Mr. Ford was closely identified with the public life of Pontypool, and had been a member of the Pontypool District Council, Board of Guardians, a manager of the County Girls' School, and a director of the Electric-lighting Company. Mr. Ford suffered a severe shock through his horse falling in the hunting-field and, a chill supervening, he was attacked by bronchitis, from which he died.

GOIFFON.—Suddenly, at San Juan Bautista, Mexico, on February 7, Mr. P. Goiffon, South American representative for Messrs. Burgoyne, Burbidges & Co., wholesale druggists, Coleman Street, E.C. Mr. Goiffon had enjoyed the most

robust health despite his many years of travel in the somewhat treacherous climate of Southern America, and it was during his late visit to England in the summer that he contracted a cold which developed into bronchitis, and has evidently hastened his end. He left England in October, and the latest advices by letter from him mention his complete restoration to health in the warmer climate, so that the fatal termination of his life, as announced by cable on February 8, came as a shock to his employers and to his family. Mr. Goiffon enjoyed the fullest confidence of his firm, and during his twenty-five years of travel for them was one of their most successful travellers, and that in a market somewhat difficult to manipulate. He was well-known amongst the drug-houses of South America, and greatly respected. He was a Frenchman, and about 50 years of age, bright, cheery, and kindly. He passed the greater part of his life in England and South America in Messrs. Burgoyne, Burbidges & Co.'s service.

NICHOLSON.—At St. James's Green, Thirsk, on February 5, Mr. J. C. Nicholson. Aged 34. Mr. Nicholson was for some time assistant to Mr. Thompson, chemist and druggist, Thirsk, and subsequently resided at Boroughbridge and Ripon.

PETTENKOFER.—The death is reported at Munich of Dr. Max von Pettenkofer. Aged 82 years. The deceased savant shot himself in a fit of depression. Dr. Pettenkofer was a pupil of Baron Justus von Liebig, and was the first chemist to study the problem of hygiene from the point of view of an exact science. He was an authority on heating, ventilation, and drainage, and was a member of the scientific academies of most civilised countries. Pettenkofer was born at Lichtenheim, near Neuberg-on-the-Donau, and first studied pharmacy and medicine in Munich. He then worked in the chemical laboratories in Munich, Würzburg, and Giessen as Liebig's assistant. In 1845 he became chemical assistant at the chief Mint office at Munich, and two years later was extraordinary professor of medical chemistry, afterwards being made head of the Hofapotheke (Court Apotheke), being promoted to ordinary professor in 1853. He discovered the well-known test for bile which is associated with his name, as well as the creatins and creatinins in the urine. In 1883 he was elected President of the Royal Bavarian Academy of Sciences, from which office he retired in 1894.

PHILLIPS.—At Sparkbrook, Birmingham, on February 1, Mr. John Dutton Phillips, chemist and druggist. Aged 65.

SPENCER.—At Chester, on February 10, Mr. James Hampson Spencer, chemist and druggist. Mr. Spencer had carried on business in Bridge Street, Chester, for 25 years, and was well-known for his photographic work. In the preparation of stereoscopic views he was especially renowned, and a photograph which he took of the King and Queen, Mr. and Mrs. Gladstone, and the Duke and Duchess of Devonshire at Hawarden Castle had a considerable reputation. Mr. Spencer was closely identified with the photographic section of the Chester Science Society, and was interested in the work carried on in the furtherance of scientific pursuits at the Grosvenor Museum, Chester.

THOMAS.—At Morriston, near Swansea, on February 5 Mr. Llewellyn Thomas, chemist and druggist. Deceased was found lying dead on his bed, and at the inquest, held on February 8, Dr. Morgan, who had made a *post-mortem* examination, said there was nothing to account for death, but the contents of the stomach had been sent for analysis, and the inquiry was adjourned.

WELLINGTON.—On February 8 at Freshwater, Isle of Wight, Mr. Henry Aplin Wellington, chemist and druggist. Aged 55. Mr. Wellington was well known in the western part of the island, where he had been in business as a chemist for twenty-five years. On the day of his death he complained of abdominal pains, but refused to see a doctor, and died in great agony shortly afterwards. A small bottle of prussic acid was found in his pocket, but a *post-mortem* revealed that death was caused by an ulcer which had perforated the stomach, and peritonitis. The doctor who gave evidence at the inquest explained the presence of the prussic-acid bottle by suggesting that deceased, being a chemist, would know that prussic acid in small doses was useful in allaying violent pain, and no doubt he took it for that purpose.

Company News.

BOOTS, CASH CHEMISTS (EASTERN), LIMITED.—The directors announce a dividend on the ordinary shares at the rate of 12 per cent. per annum.

THE "SANITAS" COMPANY (LIMITED).—The directors in their report for 1900, to be presented at the ordinary general meeting on February 20, state that the balance to credit of profit-and-loss account, after making provision for bad and doubtful debts, repairs to plant and machinery and other charges, adding the amount brought forward from 1899 of 1,543*l.* 12*s.* 11*d.*, and deducting income-tax, amounts to 15,526*l.* 16*s.* 5*d.* From this sum, 3,545*l.* 16*s.* 8*d.* has been paid as interim dividend for the half-year ended June 30, 1900, leaving, after payment of Directors' fees, a balance of 11,046*l.* 19*s.* 9*d.* It is proposed to place 500*l.* to depreciation account, to reserve account 1,500*l.*, and recommend the payment of a further dividend of 4½ per cent. and a bonus of ½ per cent., making a total distribution of 7½ per cent. for the year. This will absorb 9,030*l.*, leaving a balance of 2,016*l.* 19*s.* 9*d.* to carry forward to 1901. During the past year the new works at Limehouse have been more fully equipped at a total cost of 11,805*l.* The specialities of the company have been added to by the introduction of the "formic air-purifier," the "formic fumigator," a new disinfectant-liquid termed "Formitas," and "Sanitas" moth-powder, and beetle and insect powder. Mr. Cunningham retires from the board of directors, and offers himself for re-election.

Personalities.

MR. JOSEPH BEECHAM has been elected an alderman of the Corporation of St. Helens.

MR. G. D. LOVELUCK, chemist, Aberavon, has been elected a member of the local school Board.

MR. K. SIMS OVERTON, who was recently with Messrs. Marion, James & Co., is now representing Messrs. Hockin, Wilson & Co. for South London.

MR. J. H. SMITH, pharmaceutical chemist, lectured on "The Chemistry of Photography" to the members of the Newark Photographic Society on February 11.

MR. T. H. W. IDRIS is not standing again for the London County Council. The other pharmaceutical members are.

MR. E. H. GANE, of the staff of Messrs. McKesson & Robbins, of New York, has recovered from a somewhat severe attack of typhoid, and is at business again.

SECOND-LIEUTENANT LAKE, son of Mr. J. Hinton Lake, chemist and druggist, Exeter, has volunteered for service in South Africa with the section of the 1st Devon and Somerset Volunteer Engineers which is now being raised.

MR. JAMES ELLIMAN (Elliman, Sons, & Co., Slough) has sent a further donation of 500*l.* to the Imperial Yeomanry Hospitals Fund. It will be remembered that Mr. Elliman last year sent 1,500*l.* to the fund for the "Elliman" ward.

PROFESSOR H. LLOYD SNAPE, D.Sc., Ph.D., who for more than twelve years has held the Chair of Chemistry at the University College of Aberystwyth, has been appointed by the Lancashire County Council Director of Education for the county.

MR. EDGAR M. CHAPMAN, F.C.S., Ph.C., son of Mr. Henry Chapman, chemist, Scarborough, has successfully passed the Final examination of the Institute of Chemistry in Branch E (analysis of foods, drugs, and water), and the special examination in microscopy, pharmacology, and therapeutics.

THE OFFICER selected to accompany the contingent of Leeds Rifles enlisted for active service in South Africa is Lieutenant B. A. Hirst, son of Mr. B. Hirst, of the firm Hirst, Brooke & Hirst (Limited), wholesale druggists, Leeds. Lieutenant Hirst is a student of the Leeds College of Pharmacy, and is the fourth student of this college to go on active service.

MR. H. J. DALGLEISH, of Exeter, West of England representative of Messrs. Ford, Shapland & Co., medical label printers, London, having written to King Edward VII., humbly suggesting that the letter of the 4th inst., addressed by his Majesty to his people, should be reproduced in facsimile and delivered by the census enumerators on March 31 next to every house in the country, has received an acknowledgment by the King's command from Sir Francis Knollys, H.M. private secretary.

PRIVATE HOGARTH, chemist, of Hexham, who is serving in South Africa with the Volunteer Company of the Northumberland Fusiliers (Fighting Fifth), sends us, through Mr. John Gibson, of Hexham, the first thirty pages of a volume of "Practical Volumetric Analysis," which he picked up in one of the ruins of Jacobsdal. The pages are perfectly intact though somewhat stained, but we have not been able so far to discover from whose hands the work emanates, although the appearance of the pages is pharmaceutical.

MR. GEORGE LORIMER, son of Mr. John Lorimer, the well-known wholesale druggist of Britannia Row, Islington, N., has been offered and accepted a commission in the army, and is sailing for South Africa as second lieutenant in Paget's Horse. It will be remembered that Mr. George Lorimer served in the Honourable Artillery Company's contingent of the C.I.V. with distinction, and returned to London to take up his old work as representative of Messrs. Lorimer & Co. in London. But hereditary influences have been too powerful for him. His forbear, George Lorimer, of "Brunt Island," was honoured with a knighthood by King Alexander III. of Scotland for his valiant achievements in jousting with the Earl of Pembroke on the occasion of the coronation of Edward I. That was in 1274, and the George Lorimer of that day was one of the five hundred knights who went with King Alexander to the English court. Armorial bearings were then granted to him consisting of a laurel proper, signifying victory, betwixt two cinquefoils gules; the crest for his dexterity in riding, a horse argent. Mr. George Lorimer's old friends in the "Square" and throughout the trade will join with us in wishing him as great success as his forbear of Burntisland. The portrait shows Mr. Lorimer in the uniform of corporal of the Hon. Artillery Company.



Chemists' and Druggists' Society of Ireland.

THE annual social reunion of this Society was held on February 8 in St. George's Café, Belfast, and was a distinct success. Sir James Haslett, who was in the chair, addressed the meeting after tea, and said another year had elapsed since their last social meeting, and while they could scarcely claim to have made money during that time, he was quite certain they had all tried by honest industry to carry on their business on legitimate lines. Their trade was a somewhat difficult and intricate one, and he hoped the chemists and druggists in the city would continue in the future as they had done in the past to earn their bread by strictly honest methods. An excellent musical programme was then gone through, the accompaniments being supplied by Mr. J. H. McBratney. Mr. A. R. Hogg took a flashlight photograph of the committee during the evening.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

The Shop.

SIR,—Replying to Mr. Eberlin's query as regards coloured shop-rounds, let me inform him that it is a very common thing in France to see a pharmacie with rounds and *bocaux* (large wide-mouth tin-capped glass jars for containing herbal drugs so much in demand over there, drug-drawers not being used) all in actinic blue, but they look, with the usual fittings in walnut, very dingy and monotonous. It is handy of course when one's stock is low, as it does not give the show away to the public. Some time ago, having made the acquaintance of the proprietor, I had the pleasure of looking round a pharmacie at Hondaye, on the Franco-Spanish frontier. It was fitted in polished pitch pine, with amber-glass bottles, and was certainly a great improvement on the blue—one could see at a glance how much stock there was, and it had a much lighter appearance; but at night, being lit up with Auer (Welsbach) burners, the greenish glare quite spoilt the effect.

JOHN R. MARTEN,

Brighton. English and Foreign Chemist.

SIR,—About six years ago I had considerable damage done by the frost, and was compelled to think over some form of artificial heating, which I was anxious to use in a similar manner to what two, at least, of your correspondents are asking for. After several futile visits to and consultations with heating-engineers, I went to Messrs. Edwin Oldroyd & Co., Crown Works, Leeds, who showed me a form of steam boiler and heating arrangement they had just received from America. As it was the very thing I was wanting, they fitted it up for me during the following autumn, and it has been working for over five years to my entire satisfaction. It consists of—

(a) Cast-iron steam boiler in two sections, bolted together, steam and water gauges, safety-valve regulated to blow off at 15 lbs. pressure, automatic regulator for damper, a patent stoker, thirty-two tubes inside, and an automatic feeder regulated by steam-pressure of boiler, and a ball-tap. We use coke for fuel.

(b) Cast-iron calorifier, about 30 inches long by 4 inches diameter, cylindrical in form, with flanges at both ends. Inside this is a 1½-inch copper tube flattened to about ¼ inch and bent in a zigzag manner; this is connected at the top direct to the boiler by an iron steam-pipe. To the bottom is bolted a chamber, tapering outward and forming a stand for the whole; this (the chamber) acts as a receiver of steam and condensed water from the copper tube. Its exit is a pipe, with tap to prevent the escape of steam but allow the water to pass out into a small cistern, and is used for washing bottles, &c. The whole is practically an upright Liebig's condenser; the outlet (at the side of the top of calorifier) for the circulating water is the "flow" of the heating-apparatus (consisting of wrought-iron pipes and radiators), the inlet (at the side of bottom) is the "return." The hot-water pipes are in three sections, regulated by taps near the outlet. This apparatus heats comfortably nearly the whole of a building (used by me and my brother, a draper) 42 feet by 27 feet (outside measurement), three floors in height above the cellars. Of course, some rooms are heated in a lesser degree, to keep out the frost only. We can draw hot water at any of the floors.

(c) Five-gallon steam-jacketed pan, connected direct with the boiler, and used for making syrups, sauce, &c.

For drying bottles, melting lard, vaseline, &c., I have arranged two grates over the boiler, one above the other. I have also connected with the boiler a small steam-engine, which at 40 lbs. steam pressure would easily develop 1 h.p. This at the low pressure of the above boiler (10 lbs. to 12 lbs.) works a small drug-mill, a Bracher's C sifter and mixer, and a 6-quarts Follows & Bate's egg-beater for emulsions—all together or separately. The above are directly under my shop, easy of access, completely under my control,

and uniform in results. At present I am single-handed, and could not possibly do the work under other conditions. The cost—not quite 100%—seemed heavy at first, but I am convinced it has been well spent; my only regret is that I did not go in for a steel-plate boiler to work at higher pressure, when I might have been able to do my own electric-lighting.

Yours faithfully,

JOHN B. BROADBENT,
Pharmaceutical Chemist.

Honley, Yorks.

[The offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, are heated by Shanks' hot-water system, gas furnaces being used. The installation does its work admirably, and any subscriber who is in this neighbourhood may have it explained on presenting his card.—EDITOR.]

B.P. as a Standard.

SIR,—Dr. McWalter has the reputation of being a bold man, but at present, judging by his letters in your last issue, he seems to be panic-stricken, and to be desirous of spreading the infection. He is alarmed at the very fair standard (18 per cent. solid residue) adopted by the Birmingham public analyst for compound tincture of benzoin, and explains his dismay by the fact that it is practically impossible to obtain a benzoin which strictly conforms to the official requirements; but, seeing that the 18-per-cent. standard can be attained by using a gum with insoluble matter up to 10 per cent. (provided, of course, that the other ingredients are of good quality), the bardship of having to conform to this standard is not very apparent. The other spectres raised by your correspondent to alarm his brethren may be roughly divided into three classes:—

1. Articles, the official tests for which are obviously wrong, such as linseed oil and salicylate of bismuth. But these are oft-laid ghosts, and no trustworthy analyst would try samples by untrustworthy tests.

2. Articles the official tests for which are inconsistent. Obviously in these cases the most important factor will receive most consideration. No one would condemn a solution of perchloride of iron because the sp. gr. was wrong if it yielded a correct amount of oxide, or a sample of belladonna-ointment which showed a deficiency of lard, but a due proportion of alkaloids.

3. Articles the official standards for which are in excess of commercial attainments and popular demands. These are stumbling-stocks, but if analysts will interpret the law not pedantically, but in the light of common-sense, and pharmacists will take care to notify to the public any unavoidable deviation from pharmacopoeial requirements, the difficulties may be surmounted.

Finally, your correspondent propounds a conundrum: "How much 'calc. chlorinata' of commerce, after lying in paper for twelve months, will contain the equivalent of 33 per cent. available chlorine?" I give it up, and would ask another: "Is there a single pharmacist in Great Britain or Ireland who would keep his stock in so criminally careless a fashion?"

Yours faithfully,

Exeter, February 13.

H. WIPPELL GADD.

Soap Profits.

SIR,—The readers of THE CHEMIST AND DRUGGIST have been favoured in your last issue, through the medium of your advertisement-columns, with, presumably, No. 1 of a series of learned disquisitions on trade—how to get it, keep it, or lose it—by the Vinolia Company. I do not, for one, wish to gainsay any of the arguments put forward therein. It is all very true and convincing. I have myself, ever since I have been in business, laid down for my guidance one axiom—viz., that where my skill and knowledge are not in request—that is, where it is simply a matter of selling over the counter an article which is bound to be just the same, whether bought from me or from a store—I cannot reasonably expect a customer to pay me more for it than it can be procured for elsewhere. So far I am with the Vinolia Company. But at the foot of their discourse they say, "Write for list of prices, and minimum cutting-prices." Now, take the "Premier" Vinolia soap. It is supposed to sell at 4d. and in 1s. boxes. It is, in fact, sold at 3½d. per tablet, 10d. per box of three. A box costs 9½d. wholesale, thus leaving 8½ per cent. profit to the retailer. Is this the "living profit" to which they refer? The company offer a soap to the public, and they say, "We offer you a soap, which

is good and pure, and is, therefore, in our opinion worth 4d., and that is the price we have fixed for it. But it really is not worth 4d., as we have arranged with So-and-so that you can get it for 3½d." I have nothing to say to those who simply let their goods be cut down to cost; they are logical enough to say, with Mr. Bengier, that chemists have it in their own hands, and (practically) it does not concern them; but when a company comes forward, with much pretence of friendship and much sage advice as to trade, and, while acknowledging that they can, if necessary, so regulate their prices as to ensure a living profit, and yet have not the courage to fix the price at the face-value which they pretend their article is worth, and so let that "living profit" (*sic*) be at the rate of 8½ per cent., it is time to examine their pretensions and their "disinterested advice," and see what it is worth. Now for an application. Some time ago I noticed that the demand for soap was very good, and that customers distributed their favours freely. They did not single out this or that brand, seeming to like one just as much as another. This was all very well, but the profit on all the popular brands was so small that they were hardly worth selling, much less passing an opinion upon—as I was often asked to do. So I thought I would have one soap which would yield a fair profit, which should be good and pure, and which would therefore be likely to sell itself when once tried. After a while I got that soap, and made it a proprietary article. In the last year and a month or so I have sold eight gross tablets of that soap, and I make more on one tablet of it than on a box of "Premier" Vinolia or Pears's. I did one thing, too—whenever anyone asked me for any particular brand they got it—without a word as to my own. I have never once attempted to persuade any customer that I have got the only soap worth having, and that others are just rubbish, but, at the same time, I have never lost an opportunity, when given, of pushing my own. The event has justified me. Probably if I had been accorded a reasonable profit on other proprietary soaps I might have been content. I can assure the Vinolia Company, and all other proprietors, whether of soaps or other goods, that it is the retailers—and the small ones—who are their best friends—provided a decent remuneration is given them. The advantage of "cutting" was once thought to be great to the maker: the more sold the merrier. But the retailer's influence has not yet disappeared, and I would advise the Vinolia Company that it will pay them to demonstrate practically, as well as theoretically, that they wish well to their distributors.

Faithfully yours,

A COUNTRY JOHNNIE. (74/29)

Sicilians and Sicilian Produce.

SIR,—Permit us to say a few words in reply to the closing part of the article entitled "Where the Lemons Grow," appearing on page 160 of your Winter Issue. In our opinion, the author would have shown better sense of justice if he had refrained from picking up such a piece of outrage as that pretended Maltese proverb. Honesty and straightforwardness are not the exclusive patrimony of any one nationality, and it is absurd for anyone to attribute the monopoly of it to his own country. Of course there are black sheep in every corner of the earth. But to vilify with such a piece of indignity the people of a whole country, just on account of the wrongs of one of her black sheep, is—let us put it mildly—neither generous nor correct and certainly blameful. It appears to us that it would have been far more proper to leave Sicilians, as a race, alone, and go right to the point by giving out the name of the individual, leaving in peace the nation to which he happens to belong. It is true that the writer of the article in question states a little farther down, when talking about dealers, exporters, and manufacturers, that there are honourable exceptions, but whilst this meagre and vague redress may serve in some way to show the honest intention of the author, it is by no means enough to save any one firm from being confusedly wrapped up in the cloud of suspicion which may very hurtfully rest on many an honest, upright, and as thoroughly reliable a firm as ever existed anywhere in the world. Furthermore, had he chosen this course, he would have rendered a truly valuable service to the whole trade, as he might thus have established a precedent to serve as an example to go by in future. If essential-oil buyers could be persuaded into adopting such

means of legitimate and effective protection as would be the publication of the name of the offender in each case, we are sure it would very efficaciously tend to the speedy amendment, or at any rate the great amelioration, of the present utterly nauseating state of the essential-oil trade.

Yours respectfully,

Messina, February 8. SANTI DE PASQUALE & FIGLI.

No Appeal.

SIR,—Referring to the report of the Board of Guardians of the Ballinrobe Union *re* analysis of some medicine supplied to them and other Unions mentioned—viz., "Glycerin pepsin"—I may state that this article was sent by me to the medical officers direct as received from the makers, Messrs. Evans, Sons & Co., Liverpool. The Dublin analysts having found fault with it I sent it to the makers, who had it analysed and found it correct, copy of which report I sent to the Local Government Board. There appears a serious difference of opinion amongst the analysts, and, there being no appeal from the L.G.B. analyst as under the Sale of Food and Drugs Act, I have to remain under the censure without any redress.

Yours truly,

Sligo, February 9.

P. N. WHITE.

Compounders at the Front.

SIR,—In the hope that someone with sufficient interest will take the matter up and see that those of the civilian compounders who have completed twelve months shall be released from further service with the R.A.M.C. in South Africa, I beg to ask for insertion of this letter.

The compounders who were employed at Cape Town had no difficulty in obtaining their passage to England pending discharge when they had completed their twelve months' service, and yet we unfortunates, who have been here in Bloemfontein since the occupation, and have had the very hardest of the work, are refused any consideration when we apply for our discharge. True, we enlisted for the term of the war, but it was well impressed on us that six or eight months would be the very longest period we should be required. There are many of us who will lose good berths at home if we are compelled to remain here much longer; and we fail to see why those of the compounders who were at the base should be more favoured than those who are at the front—indeed, one would imagine that those at the front should receive any favour that could be granted in preference.

Yours truly,

FED UP. (74/12)

[This complaint comes from Bloemfontein. It is not the first that we have had respecting the prolonged service of Volunteer compounders. It undoubtedly seems a hardship, but it is the fact that compounders enlisted for a year or the term of the war, and it is upon that basis the authorities continue the service. The difficulty in regard to complaining is that compounders may have volunteered in spirit, but in act they enlisted, and the military authorities appear to take full advantage of this. Perhaps something may be done when Parliament meets.—EDITOR.]

What is a Kibe?

SIR,—In your very interesting article on chilblains (*C. & D.*, February 9, page 249), you refer to the word "kibe" in a connection new to me, and about which I should be thankful for further information.

I always thought it was intended to mean foul of the foot in cattle—an inflamed heel, leading to suppuration, and had hitherto supposed it was a veterinary metaphor of Shakespeare's when he said "the times have grown so piteous and the toe of the peasant comes so near to the heel of the courtier that it galls his kibe." Poor old Shakespeare, he thought in his day that privilege was breaking down; what would he think now, if he had to go into the servant-market for a "general" or seek an errand-boy? If kibe, in the days of "our great Eliza" meant a chilblain on the heel, the meaning of the above quotation is more apt than we Southrons have hitherto regarded it.

Yours, &c.,

HAROLD LEENEY, M.R.C.V.S.

[Kibe is given in most medical dictionaries as an ulcerated chilblain. Perhaps some of our readers can tell in what districts kibe is used as the popular expression for a chilblain.—ED.]

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

62/74. *D. L.*—If you have no wine-licence you should not attempt to sell any medicated wine (so-called) which has not been declared by the Board of Inland Revenue to be exempt. Any wine medicated with quinine containing not less than 1 gr. of the alkaloidal salt per oz. is exempt. See THE CHEMISTS' AND DRUGGISTS' DIARY, 1901, page 225.

62/67. *B. E. T.*—The sale of pure drugs recommended for the cure of disease is subject to the provisions of the Medicine-stamp Acts—*i.e.*, they may be sold by any surgeon, apothecary, chemist, or druggist without licence, and by any other person who is licensed to sell stamped medicines. If your customers are not as described they must take out patent-medicine licences or stop selling the headache-powders.

52/4. *Jean.*—You may be quite sure that if an article is not specified in the Poisons Schedule contained in the DIARY that it is not scheduled. At any rate, the question which you send has been answered in the negative a dozen times during the past year.

68/2. *Methylated Liniments.*—Permission by the Board of Inland Revenue to use methylated spirit in making certain liniments is a fiscal matter solely, and should not be construed into legalisation of the sale of such liniments so far as the Sale of Food and Drugs Acts are concerned. There is nothing in the latter Acts to prevent the sale of methylated liniments provided the seller makes known to the purchaser the difference between the article sold and the strictly legal article—*i.e.*, the B.P. preparation. The word "Methylated" on the label would suffice in most cases, but even that is unnecessary for regular customers who are in the habit of getting the preparation. Although methylated liniments are very commonly sold, there are many pharmacists throughout the country who never dream of selling aught else than the rectified-spirit preparations, because they believe that is the only legal procedure.

62/34. *Z. Z.*—Any ratepayer can obtain information regarding the tenancy of a rateable property on application to the clerk of the local authority. In large towns lists are regularly published.

58/62. *Exo.*—It is not illegal to use acid sulphate of potassium in baking-powder; the proportion of the salt to bicarbonate of soda is three to one of bicarbonate. See note in THE CHEMIST AND DRUGGIST, August 18, 1900, page 326.

64/5. *Enterprise.*—A typographical error in an Act of Parliament or other law does not render the whole Act or law, or even the section, null and void, but it may become inoperative, and it is usual in such circumstances to have the error removed by an Amendment Act.

68/1. *Jacobus.*—(1) From the particulars that you give us of the order regarding the goods the suppliers do not appear to have fulfilled their part of the contract, and it would be advisable for you to write them a strong but courteous letter previous to putting the matter in the hands of a local solicitor. (2) The Welsbach Incandescent-gas Light Company (Limited), have obtained a number of injunctions against users of mantles which infringe their patents. If the mantles that you are using are in the latter category you had better submit to the company's request.

65/64. *Incan.*—The name "Culpeper" may be used for medicines, but it would be difficult for you to prove any right to exclusive use of it.

72/58. *Nord.*—You must specify what patents or methods for making fly-papers you refer to.

72/50. *M. T. E.*—The Society of Apothecaries is a City company, and probably the Metropolitan Asylums Board, in using the term "Licentiate of the Apothecaries' Company," has the idea that those holding the assistant's certificate are licentiates of the Society. This is an erroneous supposition, as only persons who obtain the full qualification of the Society are entitled to be called licentiates.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

61/14. *Bono.*—(1) Brass-solders.—*Strong*—copper 53, zinc 47 parts; *medium*—equal parts of copper and zinc; *easily fusible*—copper 34, zinc 66. The appearance of the last is white, the other two reddish-yellow. (2) The materials used in making glass bottles are sand, red-lead, and potassium carbonate, with a certain amount of "cullet" (broken glass). Books on the subject are Professor Barff's "Glass and Silicates," 3s. 6d. (Stanford), and Chance, Powell, and Harris's "Glass-manufacture," 3s. 6d. (Bell).

48/69. *W. M. W.*—Oil for Gapes in poultry.—This is made by mixing balsam of sulphur with about its own volume of olive oil. Balsam of sulphur is made by heating 1 oz. of flowers of sulphur with 4 oz. of olive oil until the mixture becomes thick.

48/3. *Jamaica.*—The ink used by the examiners for signing British pharmaceutical certificates is an iron-gall one, so that the fumes of ammonium sulphide will be best to restore the writing when faded.

28/65. *H₂SO₄.*—The Clear Hair-restorer made with acetate of lead and sodium hyposulphite is best kept from light. There is an alternative formula given in "Pharmaceutical Formulas," in which bismuth takes the place of lead.

59/62. *W. S.*—The deposit on the argand chimney is perhaps dust, which only becomes visible when it dries as the chimney gets hot, or it may be a trace of lime from the water used for washing the chimney.

35/48. *Gutta.*—(1) The Confectioner's Slab-oil is white heavy paraffin. (2) It is probably boric acid that is wanted in cream-cheese making as a preservative. (3) The formula in "Pharmaceutical Formulas" for table-jelly squares requires glucose with the gelatin. As regards gelatin there are all sorts of qualities. Gelatin is purified and decolourised glue.

235/59. *Dido.*—Old Weight.—This is a money-changer's weight of the fifteenth century. It is intended for checking the weight of a rose-noble, which was from 113.5 gr. upwards. A set of the weights with scales in a case is valuable.

62/47. *Relicot.*—The water of which you send us the analysis is likely to be injurious to fish, as there is so much oxidisable matter in it that there will no chance of the fish getting sufficient oxygen themselves.

44/10. *Velox.*—Part of the water in lin. terebinth. can be replaced by acetic acid if an acetous liniment is required.

62/55. *Ferrum.*—Pulvis Aromaticus, B.P., 1864:—

Cinnamon	...	...	...	4 oz.
Nutmeg	...	...	...	3 oz.
Saffron	...	...	...	3 oz.
Cloves...	...	...	...	1½ oz.
Cardamoms freed from their capsules	...	...	...	1 oz.
Refined sugar	...	...	...	25 oz.

Reduce the ingredients separately to fine powder; mix them thoroughly, and pass the powder through a fine sieve. Keep it in a stoppered bottle.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed

249/18. Makers of iodoform-dredgers in vulcanite or celluloid.

60/63. Makers of statuettes of Galen about 2 feet high to act as gas or electric-light brackets.

72/40. Address of Jolly & Co., or Jolly Brothers, makers of camel-hair pencils and throat-brushes.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C.: February 14.

THERE is a better tone about the markets this week, but business is not so brisk as might be expected at this time of the year. A few important alterations have been made in values, chief among which was an advance in cinchona at auction. The small quantity offered, however, hardly affords a criterion as to the actual state of the market, but next week's auctions at Amsterdam, which are exceptionally heavy, will certainly shape the course of the quinine market. Higher prices are asked for balsam of copaiba, oils of lemon and bergamot. Citric acid is firmer again, and so is oil of star-anise on the spot. Saffron, sugar of milk, tannic and gallic acids are lower. The following table shows the principal alterations of the week, including those recorded at the drug-auctions:—

Higher	Firmer	Easier	Lower
Ambergris	Acid, citric	Acid, carbolic	Acid, tannic
Balsam copaiba	Aloes, Cape	Annatto-seed	and gallic
Buchu	Nux vomica	Sarsa. (Jam.)	Dragon's
Cinchona	Oil, anise star		bloo d
Ipecac.			Saffron
Myrrh			Sugar of milk
Oil, lemon			
Oil, bergamot			
Senna and			
pods			
Wax (Japan)			
Wax, bees'			
(Zan.)			

Arrivals.

Among the drugs and chemicals which have arrived at the principal ports of the United Kingdom from February 7 to February 14 (both inclusive) are the following:—Acetone (@ N.Y.), 137 drums; aloes (@ Bombay), 113 kegs; anise, star (@ Hong Kong, 450; antimony (Jap.), 340; arrowroot (St. V.), 1,295 packages; (@ Natal), 22 cases; asafetida (@ N.Y.), 10 cases, (@ Bombay), 265 cases; buchu, 5; camphor (crude) (@ Kobe), 71; camphor oil, 100; cardamoms, 121; castor oil (E.I.), 24, (Ital.), 40, (@ Marseilles), 72 cases, 140 barrels; chamomiles, 20; chloral hydrate, 15 cases; cinchona (@ Lisbon), 54, (@ Rotterdam), 76, (@ Bombay), 31, (@ Ceylon), 148; citronella oil, 22 drums; cloves (@ Amsterdam), 100, (@ Penang), 61; clove-stems, 158; cod-liver oil, 12 cases, (@ Hamburg), 30 barrels, (@ Aalsund), 30, (@ Drontheim), 25; cream of tartar, 44 casks; drugs (@ Hamburg, 6, (@ Monte Video), 10 barrels; essential oils (@ Singapore), 11; eucalyptus oil (Aust.), 171 cases; galls (Chin.), 200; gura arabic (@ Aden), 100, (@ Cocanada), 39; honey (@ N.Y.), 100 cases, 10 casks, 26 tierces; (@ Leghorn), 25 cases; lemon-juice, 13; myrrh (@ Aden), 6 cases, 3 bags; olibanum, 87; oil of anise star, 20; orange peel, 5 lbs.; pepper (@ Amst.), 430; quicksilver (Ital.), 180, (Span.) 25; quinine, 11 cases; rose oil (E. I.), 2; saffron, 1; saltpetre (@ Calcutta), 6,826; scammony root, 75 bags, *in tr.*; senna (@ Aden), 85 bags, *in tr.*, (@ Bombay), 64 barrels; shellac, 785; button shellac 215; soy, 95; tartaric acid (@ Bordeaux), 20; vermilion (Chin.), 20; wax, bees' (E.I.), 20, (Port.), 9, (Mor.), 20, (Ital.), 13, (@ Dusseldorf), 78; wax (Japanese), 100.

Java Quinine-auctions.

An advertisement appears in our Coloured Supplement giving the dates and the total amount of quinine to be offered in auction at Batavia by the Bandong factory.

Foreign Trade in January.

The Board of Trade Returns for January show, in spite of the generally prevailing impression that we are in for a period of dull, if not declining, business, there is no ground for such an impression so far. In the exports we have an improvement of 1,169,819l., or rather over 4.9 per cent., and a gain in imports of 1,431,602l. In the imports "chemicals, dye stuffs, and tanning-substances," show a decrease of 60,930l., and the exports of "chemicals and chemical and medicinal preparations" show an increase of 69,687l. Some reforms have been initiated in the present number of the returns in the way of further particularising the origin of imports and the destination of exports. The exports of alkali are now shown as "chemicals, unenumerated," and "soda compounds"—viz., soda ash, soda caustic, soda bicarbonate, soda crystals, and "other sorts." The imports of "alkali" now appear as "bleaching-materials" and "soda compounds." The only other alteration of interest to the trade is that the imports of rape seed from Russia are now shown.

Heavy Chemicals.

[These prices are for market centres other than London.]

Although perhaps on the whole matters in the heavy-chemical market may still be described as being somewhat quiet there is, nevertheless, a very fair and moderate all round business passing, and as the firm tone as regards values continues, there are few fluctuations to be recorded. Stocks are being fairly well regulated, and are therefore not heavy. Since the date of last writing the Board of Trade returns for January have been published, and it is pleasing to note that, as compared with January of last year, bleaching materials stand very well, both as regards the quantity exported and the value of same. This year there is an increase of 26.6 per cent in quantity, and an increased value 43.2 per cent. Alkali, unfortunately, is not in such a good position, as there has been a decrease in quantity of 15.3 per cent., but the value of this is only 5.5 per cent. decrease.

COAL-TAR PRODUCTS are only dull, and both benzols and carboxylic acids have an easier tendency. Benzols, 90-per cent., 1s. and 50-per cent., 1s.

ALKALI-PRODUCE.—With few exceptions business in this branch continues as lately reported, and quotations are mostly unchanged. Bleaching-powder is in good demand and firm, at 6l. 7s. 6d. to 7l. 2s. 6d. per ton, for softwood casks on rails; f.o.b. Tyne or Liverpool, 7l. Caustic soda maintains a firm position and is moving well, 76 to 77 per cent., 11l. 5s. to 11l. 7s. 6d. per ton; 70 per cent., 10l. 5s. to 10l. 7s. 6d. per ton; and 60 per cent., 9l. 5s. to 9l. 7s. 6d. per ton, f.o.b. Liverpool. Ammonia alkali in brisk request and firm, at 4l. 15s. to 5l. 2s. 6d. per ton, free on rails at works. Soda crystals moving well at unchanged rates, 67s. 6d. per ton, f.o.b. Liverpool, and 62s. 6d. per ton, f.o.b. Tyne. Saltcake is well maintained at 29s. to 30s. per ton, free on rails in bulk. Bicarbonate of soda, 6l. 7s. 6d. to 6l. 10s. per ton, f.o.b. Liverpool, in 5-cwt. casks, and 6l. 15s. to 7l. per ton in 1-cwt. kegs. Hyposulphite of soda in good request, 7l. to 7l. 10s. per ton for $\frac{1}{4}$ cwt. casks, and 7l. 15s. to 8l. 5s. per ton in 1-cwt. kegs. Chlorates very quiet and lower, potash crystals 3 $\frac{1}{2}$ d., f.o.b. Liverpool, and soda 4 $\frac{1}{2}$ d. Sodium sulphate (Glauber's salts) 30s. to 32s. 6d. per ton, free on rails in bags. Silicates of soda in good demand, 140° Tw, 4l. 2s. 6d. to 4l. 12s. 6d. per ton; 100° Tw, 3l. 12s. 6d. to 4l. 2s. 6d. per ton; and 75° Tw, 3l. 5s. to 3l. 15s. per ton, f.o.b. Tyne or Liverpool in usual casks. Silicate of potash, 7l. 15s. to 8l. per ton for solution, and lumps, 17l. to 17l. 5s.

Liverpool Drug Market.

Liverpool, February 14.

CASTOR OIL.—The slight decline in good Calcutta seconds, owing to the arrival by the s.s. *Workman*, has been checked, and an upward movement has again set in. The value has gone back to 4d. per lb., and holders will not sell quantity. First-pressure French is selling freely at 3 $\frac{1}{2}$ d., though, to arrive, slightly under this figure would be taken. Second-pressure French is selling at 3 $\frac{1}{2}$ d. First-pressure English is firmly held for 4d. per lb.

CHILLIES.—Sierra Leone new crop is arriving, and 17 bags have found buyers at 47s. 6d. per cwt. for good bright red.

BEEFWAX (CHILIAN).—Further sales are reported at current rates—viz., 7l. 7s. 6d. to 7l. 15s., while a small lot of "off colour" sold at 7l. per cwt.

CANARY-SEED is improving in position, and good bright Turkish is held for 34s. to 34s. 6d. per qr.

ACACIA.—A parcel of 17 serons Soudan sorts found a buyer at 60s. per cwt., and 42 serons sorts changed hands at 72s. 6d. The further arrival which has taken place will be offered at auction next week.

TURPS, after declining to 28s. 3d. and 28s. 6d., has recovered, and now 29s. per cwt. is asked.

LINSEED OIL is again lower at 25s. to 26s. per cwt., and a very quiet tone prevails in connection with the article.

ARSENIC meets with a normal demand at 18*l.* 10*s.* to 19*l.* per ton.

GINGER, AFRICAN.—Considerable sales are reported to arrive, but importers now show a tendency to withdraw all offers, as there are reports of short crops.

COPAIBA.—Retail lots of bright Maranham from druggists' hands have been sold at 1*s.* 9*d.* per lb.

QUILLAJA has been in more inquiry, about 35 tons having changed hands at 13*l.* 10*s.* to 13*l.* 15*s.* per ton.

HONEY.—Chilian is quiet, sales mostly consisting of low Pile X at 32*s.* 6*d.* and Pile I at 28*s.*

SPERMACEIN.—In public sale 10 bags of crude Chilian sold with keen competition at 89*s.* per cwt. Refined is neglected, but firmly held at 1*s.* 3*d.* per lb.

WAX, CARNAUBA, has been in more inquiry, and some small lots of fair to good yellow have been made at 62*s.* 6*d.* to 70*s.*, and good grey Maranham at 50*s.* per cwt.

American Drug Market.

New York, February 5

The market is fairly active, and there is an improved demand for many of the leading articles.

ASAFFETIDA.—Prime gum is still scarce and firm, at 30*c.* to 40*c.* per lb. Inferior grades are obtainable at 27*c.*

BALSAM COPAIBA.—Central American is steady at 34*c.* to 36*c.*, while Para is tending upwards; 42*c.* is asked by some holders, but limited amounts can be bought at 40*c.*

BUCHU-LEAVES are easier. Prime green are offered at 24*c.*, ordinary at 20*c.* to 22*c.*, and yellow at 18*c.*

CANNABIS INDICA.—Prime quality is firm, at 40*c.* to 50*c.*

CINCHONIDINE.—Manufacturers quote 27*c.* to 28*c.*, but supplies are readily obtainable at 26*c.*

COCA-LEAVES.—Truxillo are offered in small lots at 24*c.*, and Huanoco at 36*c.* The tendency is upward.

COCAINE has declined 75*c.* and supplies are now offered at \$5.25 for bulk.

ERGOT.—A fair inquiry has developed, but sales are small. Quotations are firmer at 57*c.* to 60*c.* for Russian prime quality.

GAMBOGE is scarce and higher. Prime-quality seeds are quoted at 40*c.*, and lump at 38*c.*

GINGER.—Jamaica arriving freely, and quotations are easy at 9*c.* to 10*c.* Demand is very light.

GOLDEN SEAL (HYDRASTIS) is steady at 55*c.* to 57*c.*, but business is very poor.

IPECAC. (RIO) is in weak demand, and quotations are easier at \$2.55.

JALAP.—Spot supplies are light, and values are strong at 14*c.* to 15*c.* New supplies are not expected for another month.

MORPHINE is 10*c.* higher owing to a good demand. \$1.90 is asked in bulk.

MENTHOL is firmer, and there are no sellers below \$4.

OPIMUM.—The recent advance has not been maintained, and quotations have reacted to \$3.40 owing to poor demand.

PEPPERMINT OIL.—Quotations are firm at \$1.10 for Western, but demand is small.

QUININE is exciting some interest. There is a heavy consuming demand, and some speculative inquiry. Domestic and foreign makers have advanced quotations to 28*c.* Supplies in second-hands are reduced, and holders are firmer in their views. Java is firm at 27*c.* Further improvement is expected.

SARSAPARILLA.—Mexican is firm at 7*c.* to 7½*c.*, and demand is good.

SASSAFRAS-BARK.—Prime-quality bark is scarce and strongly held at 10½*c.* Cheaper qualities can be bought as low as 8*c.*

SENEGA is almost wholly neglected, and values are very irregular; 40*c.* is generally quoted, but 38*c.* will buy.

Cablegrams.

HAMBURG, February 14, 1.55 P.M.:—For Cartagena ipecacuanha the advanced figure of 14*m.* per kilo. has been paid. Refined camphor in second-hands is quoted at 440*m.* per 100 kilos.; and Japanese wax is firmly held at 60*m.* per 100 kilos

* * *

NEW YORK, February 14, 3.59 P.M.:—Business is brisk here. Quinine is firm at 28*c.* per oz. Cascara sagrada is higher at 5½*c.* per lb. Both Rio and Cartagena ipecac. are firmer at \$2 and \$2.60 per lb. respectively. Balsam of copaiba is firm at 38*c.*, and tolu is higher at 32*c.* Mexican sar-aparilla is irregular at 7*c.*, and buchu unsettled at 22*c.* per lb.

London Markets.

ACID, CITRIC.—The position is firmer again, there being no sellers under 1*s.* 4½*d.* per lb. for English, and some are asking 1*s.* 4¾*d.* Makers remain unwilling sellers, either spot or forward.

ACIDS, GALLIC AND TANNIC.—Prices have been reduced, makers quoting 2*s.* 4*d.* per lb. for gallic for 1-cwt. contracts, and 2*s.* 4*d.* for 2-cwt. lots of tannic (8.P. quality). There are sellers in second-hands below these figures.

ACID, TARTARIC, is also a strong market, values being unchanged, at 1*s.* 0½*d.* per lb. for English and foreign 11¾*d.* to 11½*d.*

BORAX.—Keeps firm, at convention rates of 17*s.* per cwt. for crystals, and 18*s.* for powder. In second-hands there are sellers at 6*d.* below these prices.

CINCHONA.—There was a brisk demand at the auctions on Tuesday, and as will be seen from the table below the bulk of the small supply offered found buyers, principally for American account. Prices were about 10 per cent. higher compared with the previous Amsterdam sale, the unit averaging fully 1½*d.*

The following table shows the quantity of goods offered and sold:—

	Packages offered.	Packages sold.
East Indian cinchona ...	746	610
Ceylon cinchona ...	318	243
Cultivated Calisaya cinchona...	114	114
Java cinchona ...	90	90
	1,268	1,057

The following were the quantities of bark purchased by the principal buyers:—

	Lbs.
American factory ...	84,285
Messrs. Howards & Sons ...	39,170
Brunswick factory ...	31,145
Imperial factory ...	27,090
Paris factory ...	22,231
Frankfort-on-Main and Stuttgart factories ...	4,210
Mannheim and Amsterdam factories ...	2,748
Druggists, &c. ...	14,190

Total quantity sold ...	225,069
Bought in or withdrawn ...	58,485

Total quantity offered and sold ... 283,554

The following prices were paid:—

SOUTH AMERICAN.—Bolivian cultivated Calisaya, fair quill, 7½*d.* to 8½*d.*; and thin papery, 4½*d.* per lb.

JAVA.—Twigs, 3½*d.*; Ledgeriana, stem chips, 3*d.* to 4*d.*; and root, 4½*d.* per lb.

CEYLON.—Crown, chips and shavings, 2½*d.* to 5*d.*; broken quill and chips, 2½*d.* to 4½*d.*; Hybrid, natural stem chips, 3½*d.* per lb.

EAST INDIAN.—Red chips, 2½*d.* to 3½*d.*; root, 3½*d.* to 4½*d.* Natural, branch, 2½*d.* to 2¾*d.*; chips, poor, 3½*d.* to 3¾*d.*; fair to good, 4½*d.* to 5½*d.*; rich, 6*d.* to 7*d.*; root, 5*d.* Renewed, 5½*d.*; rich, 7¾*d.* to 9*d.* per lb.

CREAM OF TARTAR is quiet but firm, at 77*s.* per cwt. for best white French crystals, and 79*s.* for powder; 98 per cent. powder is 81*s.*

GLYCERIN is unchanged, refined being weak owing to the excessive competition between English makers, while crude is very firm. English refined is quoted 61*s.* per cwt. and upwards for double-distilled, sp. gr. 1.260.

LEMON-JUICE (CONC).—A Messina report dated February 1 states that under the influence of local demand to cover previous sales the market is firm, and stock being small holders ask higher prices. The new crop is now under press. Receipts, it is anticipated, will not be abundant, owing partly to a small lemon crop and partly to the increased manufacture of citrate of lime. 18*l.* per pipe, f.o.b., is quoted.

MENTHOL.—Early in the week 12*s.* 6*d.* per lb. was paid for Kobayashi make, but since then business has been done at 13*s.*

MORPHINE.—Makers report a fair demand at the official quotation of 5*s.* per oz. for hydrochloride in powder.

MUSK.—A report is current that musk will be dearer owing to the land between the interior of China and the ports being unsettled, and caravans have ceased to come down.

OIL, ANISE STAR, is firmer, 5*s.* 4*d.* per lb. spot having been paid this week.

OIL, BERGAMOT.—Another advance has taken place in Sicily, finest oil being quoted in one direction at 11*s.* 3*d.*

per lb., c.i.f., while 10s. 9d. is another agent's quotation. It is quite anticipated that still higher prices will prevail.

OIL, COD-LIVER.—No quotations for new oil are available on the London market, and opinions as to what prices are likely to be, greatly differ. Our Bergen correspondent writes on February 9 that, although rough weather still prevails, the reports from all the fishing districts are pretty good, and the prospects are much better than they were last year at the beginning of the season. At the time of writing no figures are available regarding the catch. Of the new oil, a few small lots have arrived at Bergen. The opening prices for non-freezing quality are expected to be about 60s. to 62s. per barrel, f.o.b., Bergen. The total exports from Bergen to date amount to 638½ barrels, against 517 barrels at the same time last year.

OIL, LEMON.—Dearer prices are again asked from Messina—viz, 4s. 3d. to 4s. 4d. per lb., c.i.f., for guaranteed quality.

OIL, LEMONGRASS.—For forward shipment business has been done at 3½d. per oz., c.i.f.

OIL, NEROLI.—Reports from the South of France intimate that the snow and cold have been quite unprecedented, and higher prices are expected after the new crop has been gathered in May. Prices are as yet unchanged, Bigarade quality being quoted 7s. 6d. per oz., super 6s. 6d., and fine 6s. Oil of Sicilian make is quoted 152s. per lb. for finest; Bigarade petals, 90s., and super, 68s.

OPIUM.—The London market is quiet and unchanged. Fine Persian is easier, if anything, being obtainable at 14s.

CONSTANTINOPLE, February 8.—The market is, if anything, weaker, at from 9s. 2d. to 9s. 4d. per lb., f.o.b., for "Druggists'." It is now certain that practically all save the early autumn sowings were destroyed by recent frosts. The weather has improved considerably, and keeps fine and dry, and peasants are now resowing damaged fields. The young plants will, however, not be in a position to withstand any cold.

SAFFRON.—Prices continue to decline, 26s. 6d. to 27s. per lb. net being quoted for Valencia, according to quality.

SPICES.—There is still an absence of business of any importance. The auctions on Wednesday went very slowly, there being scarcely any demand from the trade. *Cochin Ginger* is steady; washed rough sold at 33s. per cwt., and small brown rough at 32s.; Calicut brown rough was bought in at 35s. to 37s. per cwt.; good small cut partly sold at 45s. and medium and bold at 72s. per cwt. *Zanzibar Cloves* are steady at 4½d. per lb. for March-May delivery. Penang were bought in at 9d. per lb. for good, and at 7½d. for fair. *Pimento* firm; ordinary sold at 2½d., and fair at 2¾d. per lb. *East India Capsicums* were bought in at 25s. per cwt. *Mace* very quiet; good red pickings were withdrawn at 1s. 3d. per lb., and middling red at 1s. 4d. per lb. Fine old *Cassia-lignea* was bought in at 55s. per cwt., false packed partly sold at 43s. per cwt. Wild *Cassia-buds* sold at 24s. per cwt. *Cinnamon-chips* were bought in at 3¼d. per lb. *Pepper* continues dpressed, light Malacca black sold at 5¼d. per lb., Lampong was bought in at 5¼d. per lb., Alleppy at 6¼d., and Tellicherry at 6¼d. per lb. Singapore is quoted 6¼d. on the spot; a sale of March-May shipment being reported at 6¼d. per lb. White also very dull, fair to good Singapore was bought in at 9¼d. to 9¾d., and fine at 10½d. to 1s. per lb. Siam was bought in at 9¼d. to 9¾d., and Penang at 8½d. per lb.

STROPHANTHUS.—Business has been done in green Kombé seed at from 3s. 6d. to 4s. per lb. the latter figure for broken lots.

SUGAR OF MILK.—In order to meet competition American make has been reduced to 48s. per cwt. for ton-lots of powder, but even this figure can be shaded. Italian powder is quoted 47s. 6d. for a similar quantity.

SULPHUR.—A report from Messina, dated February 1, states that the principal event during January has been the agreement between the Anglo-Sicilian Sulphur Company and the producers for another five years. Although the prolongation had been generally anticipated, still the late forced sale, made at a loss, for the purpose of intimidating dissentients, had produced uncertainty as to the future. Those who initiated it thought it probable that five years' experience of Sicilian affairs would have proved sufficiently discouraging. The statistics to December 31 show that the

exports of brimstone from Sicily during the last five years has increased by 150,000 tons, owing chiefly to the development of paper trade, and the production has not increased in the same proportion. Sicilian sulphur is quite free from arsenic. The late poisoning-cases in England have proved sufficiently the futility of using cheap but inferior sulphuric acid made from pyrites. Efforts will be made by the company to obtain a prolongation of the contract for another fifteen years, but the chief obstacle will be the resistance of the Sicilian mine-owners, who will by all means try to cause dissension. Unmixed seconds are quoted 78s. 6d., thirds 69s. 9d., refined block sulphur (100 per cent.) 82s. 9d. per ton of 13 Sicilian cantars, f.o.b.; refined roil sulphur, 89s. 9d.; sublimed flowers, 97s. 6d. to 93s. 6d. per ton of 20 cwt., f.o.b.

London Drug-auctions.

THERE was a better demand than usual at the auctions today, and a fair proportion of the goods was disposed of. Among the dearer articles were ambergris, myrrh, buchu, bees' wax, senna, and ipecacuanha, while dragon's-blood, annatto-seed, and Jamaica sarsaparilla were cheaper. The following table shows the goods offered for sale publicly, those marked with an asterisk referring to the lots sold privately:—

Offered		Sold	Offered		Sold
Aconite (Jap.)	8	0	Kino	2	0
Albumen	12	0	Kola	24	5
Almonds, bitter	22	0	Lime-juice	2	0
Aloes—			Liquorice-root	156	0
Cape	51	31	Manna	2	2
Curacao (gourds)	200	200	Mastich	6	0
Socotrine	60	20	Matico	13	0
Zanzibar	81	0	Musk	7	0
Ambergris	4	2	Myrrh	29	16
Ammoniacum	1	0	Nux vomica	241	56
Anise	72	48	Oil, anise star	15	0
Anise, star	11	0	cinnamon	6	5
Annatto-seed	34	13	eucalyptus	77	0
Antimony	80	0	fennel	1	1
Arca-nuts	23	0	lime	6	0
Argol	12	12	orange	2	1
Asphaltum	30	0	peppermint	10	0
Bael-fruit	10	0	rose	5	1
Balsam copaiba	20	12	sassafras	4	0
Tolu	12	12	Opium	2	0
Benzoin—			Orange-peel	39	5
Palembang	79	0	Orris	11	1
Siam	29	0	Olibanum	15	15
Sumatra	98	41	Orange blossoms	11	0
Buchu	35	26	Orchella-weed	19	0
Calumba	384	201	Patchouli-leaves	2	0
Camphor (refined)	1	1	Quince-seed	2	0
Cardamoms	293	69	Quinine sulph.	3,000 oz.	3,000
Cascara sagrada	99	0	Rhatany	15	0
Castor-seed	10	0	Rhubarb	243	21
Chiretta	65	0	Saffron	1	0
Cinchona	20	0	Sarsaparilla	85	40
Cinnamon	10	0	Sassafras	5½ tons	0
Condurango	25	0	Scammonium	5	0
Coca-leaves	32	7	Senna—		
Cocculus indicus	75	0	Alexandrian	72	0
Colocynth	129	0	Tinnevely	123	97
*Croton-seed	69	14	Seed lac	18	18
Cubebs	48	0	Soy	5	5
Cumin-seed	22	4	Squills	34	0
Cus Cus	10	0	Tamarinds	69	0
Cuttle-fish	74	16	Tragacanth	17	5
Damiana	5	0	Tonka-beans	23	5
Dragon's-blood	24	15	Turtle, dried	3	0
Ergot	19	6	Vanilla	2	2
Galangal	12	0	Vermilion	17	0
Galbanum	10	0	Wax (bees')—		
Galls	119	73	Benguella	9	9
Gamboge	16	1	Carnauba	93	0
*Gentian	20	10	East Indian	50	0
Gum acacia	109	1	Italian	19	0
ammoniacum	105	0	Jamaica	6	6
Honey (Australian)	99	3	Madagascar	28	0
Calif.	3	0	Morocco	23	0
Jamaica	112	41	Mozambique	13	0
Ipecacuanha—			Spanish	27	0
(Cartagena)	61	15	Zanzibar	89	43
(Rio)	33	11	Wax (Japan)	77	49
Kamala	9	2			

ACONITE.—Japanese was held for 40s. per cwt.

ALOE.—Two parcels of Cape offered, and the first, consisting of 25 cases, sold at 25s. to 25s. 6d. for good bright hard; 23s. to 23s. 6d. for fair ditto; and 19s. to 20s. for dull seconds. Of the remaining 25 cases offered 15 of good bright hard quality were withdrawn, and 5 sold at 21s. 6d. for seconds. There was no demand for the Zanzibar aloes in tins. Three parcels of Socotrine were offered, of which one sold at 75s. per cwt. for good hard. Of Curaçao aloes in gourds 200 small and medium sizes were shown, and sold at 22s. 6d. per cwt. for fair livery to dark mixed.

AMBERGRIS.—Dearer; a tin containing two nodules of good flavour, weighing 14 oz., sold at 105s. per oz.; another tin had been sold privately.

ANISE.—Twenty bags of Russian offered without reserve, and sold, at 17s. per cwt., net. Of 18 bags Spanish, 8 sold at 19s., and for another parcel of 20 bags, without reserve, 19s. was accepted.

ANNATTO-SEED sold at lower rates, 1½d. per lb. being accepted for 19 packages of fair bright Ceylon.

ARGOL.—Small and dusty grey from the Cape sold at 44s., and pinky at 37s. per cwt.

BALSAM COPAIBA.—Privately there has been a good demand for this article, and prices are likely to be dearer. Maranhão is quoted 1s. 10d., Para 1s. 9d., and Maracaibo 1s. 8d. per lb. In auction 10 cases of good bright thick Maracaibo had been sold privately. Eight kgs of thin filtered Para were held for 1s. 9d., and subsequently sold privately at 1s. 8d., and for 2 cases of thick cloudy Cartagena 1s. 5d. was paid.

BALSAM TOLU sold at unchanged rates, 1s. 1d. to 1s. 2d. per lb. being paid for large tins partly of drossy quality.

BENZOLIN sold at very firm rates. Sumatra, very good seconds, well packed with small and medium almonds, sold at 8l. 15s. per cwt.; fair seconds ditto, 7l. to 7l. 7s. 6d.; and ordinary, 6l. 5s. up to 6l. 17s. 6d. per cwt. for barely fair. Palembang, good seconds, were bought in at 52s. 6d. No Siam sold; a bid of 87s. 6d. (90s. wanted) was refused for dark and dull blocky sorts, and for nondescript stuff, mostly hard, almondly block, 5l. 7s. 6d. was refused, the parcel being bought in at 6l. 5s.

BUCHU was slightly dearer than at the last public auctions, fair to good round green leaf being disposed of at from 10d. to 10½d., and at 9d. for yellow ditto.

CALUMBA was in good demand, and quality of the offerings had improved. Good bright natural sorts sold at 18s. 6d. to 22s. 6d. for yellowish, and fair ditto, 16s. to 16s. 6d.; and mouldy, 10s.

CAMPHOR.—One cask of refined in bells brought 2s. per lb.

CARDAMOMS sold at unchanged but irregular rates, at the following prices:—Ceylon-Mysore, fine bold long pale, picked, 3s. 7d.; medium to bold ditto, 3s. 5d. to 3s. 6d.; dullish ditto, 3s. 2d. to 3s. 4d.; good medium pale, 2s. 6d. to 2s. 11d.; long dullish, 2s. to 2s. 2d.; small and medium pale, 1s. 10d. to 2s. 1d.; small dull, 1s. 7d.; pale split and pickings, 1s. 4d. to 1s. 7d.; brown and split, 1s. 4d. Seeds, 1s. 9d. to 2s. 3d. per lb. Six cases of so-called wild Chinese seed sold "without reserve," at 2d. per lb.

For the year ending December 31, 1900, the exports from Ceylon were 537,455 lbs., against 499,959 lbs. in 1899, 531,473 lbs. in 1898, and 532,830 lbs. in 1897. Of the above amount, 333,996 lbs. in 1900 were shipped to U.K., 117,290 lbs. to India, and 65,529 lbs. to Germany, &c.

COCA-LEAVES were sold at slightly easier rates in auction, 9½d. per lb. being paid for country-damaged Ceylon leaves.

CUMIN.—A small lot of Morocco brought 34s. per cwt.

CUTTLE-FISH BONE.—Eleven bales of small dull bone sold at 2d. per lb., "without reserve," and five cases nice bold white at 3½d. For another parcel of similar quality the limit had been raised to 4½d.

DRAGON'S BLOOD was about 20s. per cwt. lower, the chief sales being nine cases of good to fine reboiled lump, which offered and sold without reserve at from 9l. 15s. to 10l. 5s. per cwt. This parcel represented the last of the fine gum in first

hands. Five cases of good thin reeds well wrapped were limited at 9l. Of another lot of six cases, three sold at 9l. 7s. 6d. per cwt. subject for fair bright block, the remaining three cases had been disposed of privately.

ERGOT.—In auction an odd bag of Russian sold at 2s., and 13 bags of Spanish were held for 2s. 5d., while 5 barrels of fair sold at 2s. 3d. Market is quiet privately.

GALLS.—Persian blue have been in fair demand, at 60s. to 65s. spot, and green at 52s. 6d. to 55s. For arrival, higher prices are asked—viz., 60s. and 50s., c.i.f., for blue and green respectively. In auction, 25 bags of small blue sold at 50s., and various lots of sea-damaged parcels at from 33s. to 65s. per cwt.

GAMBOGE.—Although the article is scarce privately, no business was done in auction to-day, in consequence of the higher prices now asked. Good rough unsorted Siam pipe was held for 12l. per cwt.

GUM ARABIC.—There has been a fair demand for so-called Persian insoluble descriptions, selected quality having sold at 23s.; small white sorts, 18s. 6d.; good ordinary ditto, 17s.; and low grades, 14s. to 16s. per cwt. In auction a case of pale picked Frieste gum apparently sold at 13l.; several other cases were bought in at this figure.

HONEY.—Jamaica of good quality, but partly set, was bought in at 27s., while brown set ditto sold at 24s. to 25s. For 8 casks of set white Jamaica 30s. was asked, and 20 cases of brownish ditto sold at 28s. per cwt. Three cases Australian of low quality realised 10s., subject. Privately good candied Californian is held for 45s.

IPECACUANHA.—Previous to the auctions 10s. 9d. had been paid for small lots of Rio, which figure shows no change from last week. The greater proportion of the first-hand stock of Cartagena root is now in the hands of two dealers, who have been quietly buying for speculative account. They now quote 7s. In auction, of 13 packages Cartagena offered by one broker, 4 cases sold at from 6s. 3d. to 6s. 5d. per lb. for country-damaged. Of 11 cases badly country-damaged and damp, 7 sold cheaply at from 3s. 11d. to 4s. 2d. Two other parcels of 12 and 21 packages were held for 7s. Rio was 6d. to 8d. dearer on the prices paid at the last auction, and about 3d. dearer on those paid privately, fair to good bold root selling at from 11s. to 11s. 2d., and a bale of sea-damaged at 11s. One cask (weighing 152 lbs.), which was catalogued as East Indian, but was said by the broker to be genuine Brazilian root imported via Pernambuco, and to contain "a great deal of emetine, &c." sold cheaply at 10s. 10d. The parcel in question had come from Hamburg, and was similar in appearance to the ipecac. from the Straits Settlements offered on June 22, 1899.

JALAP.—A parcel of 28 bags catalogued for auction, of which samples were not shown, had been sold privately.

KAMALA.—Of six cases offered by one broker two sold at 6d. per lb.

KOLA.—Five bags of natural quarters from S. Thome (West Africa) sold at 2d. per lb., subject. Nine bags of washed W.I. were held for 9d.

The exports of kola from Grenada during 1899 were valued at 1898, 43l.; 1897, 88l.; 1896, 180l.; 1895, 133l.; and 1894, 41l.

MANNA.—Two cases of sorts realised 7d. per lb. "without reserve."

MASTICH.—Privately the market is quiet, although stocks on this market have now become small. In auction, 6 cases were bought in at 1s. 5d. per lb.

MYRRH remains very scarce privately. In auction an advance of about 7s. 6d. per cwt. was paid on the last public prices; seven bales of good bright pale Aden sorts sold at from 85s. to 87s. 6d. with good competition, two cases of dark pickings without reserve at 30s., and five casks of low ditto at 10s. per cwt. Two other cases of siftings offered by another broker sold at the high figure of 60s., and two cases of picked gum were bought in at 8l. per cwt.

NUX VOMICA was held for high prices, 35 bags of fine bold silky from Bombay brought 8s. 6d. per cwt., and dull and earthy Madras seed was limited at 7s. 6d., while a bag of sweepings sold at 4s.

OIL, CINNAMON.—Four cases from Ceylon sold at 3½d. per oz., and a case of leaf ditto at 1½d.

OIL, EUCALYPTUS.—Privately there are sellers of Globulus oil at 1s. 8d. per lb. No business in auction.

OIL, FENNEL.—A case of bitter sold "without reserve" at 1s. 3d. per lb.

OLIBANUM.—Siftings sold at 22s.

QUINCE-SEED.—For 2 barrels of fair Spanish 1s. 2d. was refused, the limit being 1s. 3d. per lb.

QUININE.—After the close of our last report the market became dull and easier, owing to the United States wants being supplied for the present, and the week ended with small sales for spot at 1s. 1½d., and May at 1s. 2¼d. per oz. This week the market opened easier again, with a small business at 1s. 1½d. for spot, but on Tuesday there was a slight recovery previous to and after the London bark sales, business being done on the spot at 1s. 1½d. to 1s. 2d., March at 1s. 2d., and May at 1s. 2¼d. In auction 3,000 oz. of Taillandier's brand sold at 1s. 1d. per oz. Since then, however, the market has been easier, owing to the heavy shipments of bark from Java for the first half of the month (525,000 Amst. lbs.), and there are sellers to-day at 1s. 1½d. spot.

RHUBARB.—No really fine quality was offered, and the bulk of the business was in parcels offered "without reserve." The following prices were paid:—Shensi, medium round, three quarters pinky and grey fracture, one quarter dark, 2s. to 2s. 3d.; medium flat ditto, all pinky and grey fracture, 2s. 2d.; pickings, 1s. 3d., subject. Common round Shensi, 6d., subject. Four cases of flat, dull-coated, high-dried, three quarters pinky fracture, one quarter grey and dark, sold "without reserve" at 9d. per lb.; a case of round Carton, fair coat, three quarters grey fracture "without reserve" at 10d. per lb., and a bag of low wormy, 3d. Six cases of common rough round high-dried, wormy, half grey half dark fracture sold "without reserve" at 4½d. per lb.

SARSAPARILLA.—Very slow of sale, business being confined to grey Jamaica at 1s. 4d. for sound, and 1s. 1d. to 1s. 3d. for damaged.

SEEDLAC realised 46s. per cwt.

SENNA.—The small supply of Tinnevely leaf offered sold at rather dearer prices, fair to good green realising from 3¼d. to 4½d.; small and medium greenish leaf, 1¼d. to 2½d.; and ordinary small and medium ditto, 1¼d. to 2d.; and low stalky and brown, at ¾d. to ¾d. per lb. Pods were 1d. dearer, at from 4½d. to 5½d. No Alexandrian sold, but business has been done privately, some 10 to 15 cases changing hands in one quarter at previous prices.

SOY.—Tongleechan brand sold at 1s. 2d. per gallon.

TONKA BEANS.—Very slow of sale in auction; for good Angostura 3s. per lb. was wanted, but there were no buyers. Five cases of Para sold at 1s. 5d. for good black, and 10d. and 1s. 1d. for foxy ditto. There is said to be a heavy stock in London.

WAX, BEES.—In good demand. Zanzibar sold readily at from 6l. 12s. 6d. to 6l. 17s. 6d.; Antigua (1 box). 7l. 10s.; Benguela (9 bales). 6l. 15s.; and Jamaica (5 packages), 8l. 2s. 6d. to 8l. 7s. 6d. No East Indian or Morocco sold.

WAX, JAPANESE.—Dull squares out of condition sold at 20s. to 25s., and damaged at 12s. to 14s. per cwt.

German Drug Market.

Hamburg, February 12

Our drug-market is quiet; the navigation into the interior is still closed, and buying orders are scarce.

ALOES.—Quiet, Cape is quoted 50m., and Curaçoa, 36m. per 100 kilos.

CITRIC ACID is very firmly held, and shows a fair demand; to-day's quotation is 295m. per 100 kilos.

CAMPHOR, REFINED, is quiet, and somewhat easier owing to forced sales; second-hand is quoted 442½m. per 100 kilos. for prompt delivery.

AGAR-AGAR shows a very firm market, at 390m. to 405m. per 100 kilos.

ERGOT is unchanged, Russian, of good sound quality, is quoted 490m.; and Spanish. 510m. per 100 kilos.

OPIMUM is firmer, at 20¼m. per kilo.

QUININE is very firm with only small stocks; manufacturers ask 39m. per kilo.

IPCACUANHA is firmer with a better demand, Cartagena is held for 13½m., and Rio, at 23m. to 24m. per kilo.

CONDURANGO is also firmer, and the last price at 85m. is lowest **CEVADILLA-SEED** has much improved, and is quoted 75m.

COD-LIVER OIL is reported higher from Norway, and costs 70m. per barrel for prime Lofoden.

ANTIMONY is firmer, and 34m. has been paid.

LYCOPodium has been in brisk demand, and a large business has been done at 425m. to 430m.

MENTHOL is unchanged, but firm; about 15 cases to arrive have been sold recently at 28½m., and further 10 cases at same price is obtainable.

SENEGA is to be had at 390m., but bids are asked.

COLOCYNTH.—Large orders have come to hand, and stocks are scarce now. For whole prime appls., 275m. to 280m. is paid.

STAR-ANISE is steadier, at 135m. to 136m. per 100 kilos., spot.

WAX, JAPANESE, is reported dearer from Japan; spot is held at 60m. per 100 kilos.

STAR-ANISE OIL is dull, and lower at 12m. per kilo.

Coming Events.

Saturday, February 16.

Inter-Pharmacy Football League. Match between the Metropolitan College and Bloomsbury Square teams.

Monday, February 18

Society of Chemical Industry (London Section), Burlington House, Piccadilly, W., at 8 P.M. Discussion on the "Occurrence and Detection of Arsenic in Manufactured Products."

Tuesday, February 19.

Leeds College of Pharmacy, Mercantile Restaurant, Leeds, a 7 P.M. Smoking-concert. Mr. L. S. Bentley in the chair.

Wednesday, February 20.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association. Mr. J. Thomson on "Ambition."

Pharmaceutical Society of Great Britain, North British Branch, 36 York Place, Edinburgh, at 8.30 P.M. Evening meeting. Pharmacopoeial notes and suggestions:—1. "Vinegar of Squill." 2. "Stronger Solution of Iodine." 3. "Syrup of Rhubarb and Other Syrups." 4. "Compound Tincture of Benzoïn." 5. "Diluted Mercuric-nitrate Ointment," by Mr. G. F. Merson.

Newcastle and District Chemists' Association, Hôtel Métropole, Newcastle-on-Tyne, at 8.30 P.M. Smoking-concert.

Liverpool Pharmaceutical Students' Society, School of Pharmacy, 6 Sandon Terrace, Upper Duke Street, Liverpool, at 8.30 P.M. Mr. H. Wyatt, jun., on "The Pharmacy of the Latin Nations."

Nottingham and Notts Chemists' Association, Masonic Hall, Goldsmith Street, Nottingham, at 9 P.M. Mr. A. R. Bennett on "The Pharmacy of Some Modern Pharmaceutical Products."

The Western Chemists' Association, Westbourne Restaurant, Craven Road W., at 9 P.M. Smoking-concert.

Cardiff and District Chemists' Association. Annual meeting and dinner.

Cardiff and District Pharmaceutical Association, at 3.30 Inaugural meeting in the Assembly Room, Town Hall, Cardiff, when an address will be given by Mr. G. T. W. Newsholme. At 6.30 P.M. a dinner will be held at the Park Hotel, tickets for which, 6s. 6d. each, can be had from Mr. W. J. Saunders (Hon. Secretary), 47 Queen Street. Morning dress to be worn.

Thursday, February 21.

Midland Pharmaceutical Association, Mason College, Birmingham, at 8.30 Mr. Humphrey's lecture on the "Teeth of Fish and Reptiles," postponed from February 14.

Chemists' Assistants' Association, 73 Newman Street, Oxford Street, W., at 9 P.M. Paper by Mr. F. Curry.

Barnsley and District Chemists' Association. Inaugural dinner. *Chemical Society,* Burlington House, W., at 8 P.M. Amongst the papers to be read is one by Mr. A. Lapworth and Mr. W. H. Lenton on "Constitution of Bromocamphoric Anhydride and Camphanic Acid."

Mr. G. F. Forster, Hon. General Secretary of the Public and Poor-law Dispensers' Association, desires to remind fellow-dispensers and friends that their postponed concert promoted by the Association will be held at Stone's Restaurant, The Broadway, Ludgate Hill, E.C., on February 27, at 8 P.M. Tickets already issued for January 30 are available for February 27, and further information or tickets may be procured by communicating with Mr. Forster, at 137 Nag's Head Road, Ponder's End.